

# Inventn Search

TATE 09/888,997

=> d his

(FILE 'HOME' ENTERED AT 16:54:03 ON 20 NOV 2002)

FILE 'HCAPLUS' ENTERED AT 16:54:11 ON 20 NOV 2002

E AYLWARD J/AU

L1 34 S E3,E5,E7-10

L2 5 S L1 AND ?INGENAN? 5 cites

SELECT RN L2 1-5

*selecting Reg #15 from citations*

FILE 'REGISTRY' ENTERED AT 16:55:59 ON 20 NOV 2002

L3 47 S E13-59

SAVE TEMP L3 TAT997I/A

*47 cpds in L2 citations*

FILE 'HCAPLUS' ENTERED AT 16:56:38 ON 20 NOV 2002

L4 5 S L2 AND L3

*5 citations w/ 47 cpds displayed*

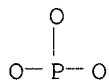
TATE 09/888,997

=> d ibib abs hitstr ind 1

L4 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:122803 HCAPLUS  
DOCUMENT NUMBER: 136:177959  
TITLE: Diterpenes obtained from Euphorbiaceae for the treatment of prostate cancer  
INVENTOR(S): Aylward, James Harrison; Parsons, Peter Gordon  
PATENT ASSIGNEE(S): Peplin Research Biotech Ltd., Australia  
SOURCE: PCT Int. Appl., 120 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002011743	A2	20020214	WO 2001-AU966	20010807
WO 2002011743	A3	20020328		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001079493	A5	20020218	AU 2001-79493	20010807
PRIORITY APPLN. INFO.:			AU 2000-9231	A 20000807
			WO 2001-AU966	W 20010807
OTHER SOURCE(S): MARPAT 136:177959				
AB	The invention discloses a chem. agent of the diterpene family obtained from a member of the Euphorbiaceae family of plants for use in the treatment of prophylaxis of prostate cancer or a related cancer or condition.			
IT	13598-36-2D, Phosphonic acid, alkylidenebis- derivs. RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Bisphosphonate; diterpenes from Euphorbiaceae for treatment of prostate cancer)			
RN	13598-36-2 HCAPLUS			
CN	Phosphonic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)			



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

IT 1984-15-2 15663-27-1, Cisplatin 38937-66-5  
67707-88-4, Ingenane 67707-88-4D,  
Ingenane, derivs. 75567-37-2 75567-37-2D,  
derivs. 75567-38-3 75567-38-3D, derivs.  
82425-35-2 82425-35-2D, derivs. 210108-85-3,  
Jatrophone 1 210108-85-3D, Jatrophone 1, derivs.  
210108-86-4, Jatrophone 2 210108-86-4D, Jatrophone 2,

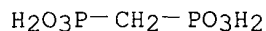
derivs. 210108-87-5, Jatrophone 3 210108-87-5D,  
Jatrophone 3, derivs. 210108-88-6, Jatrophone 4  
210108-88-6D, Jatrophone 4, derivs. 210108-89-7,  
Jatrophone 5 210108-89-7D, Jatrophone 5, derivs.  
210108-90-0, Jatrophone 6 210108-90-0D, Jatrophone 6,  
derivs. 210108-91-1, Pepluane 210108-91-1D, Pepluane,  
derivs.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)

(diterpenes from Euphorbiaceae for treatment of prostate cancer)

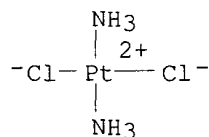
RN 1984-15-2 HCAPLUS

CN Phosphonic acid, methylenebis- (9CI) (CA INDEX NAME)



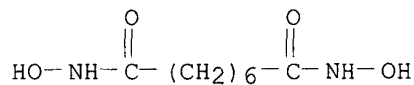
RN 15663-27-1 HCAPLUS

CN Platinum, diamminedichloro-, (SP-4-2)- (9CI) (CA INDEX NAME)



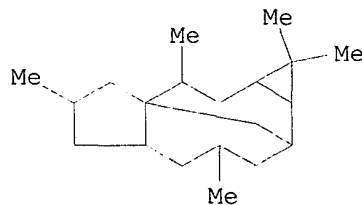
RN 38937-66-5 HCAPLUS

CN Octanediamide, N,N'-dihydroxy- (9CI) (CA INDEX NAME)



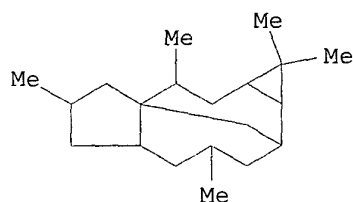
RN 67707-88-4 HCAPLUS

CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-  
1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX  
NAME)



RN 67707-88-4 HCAPLUS

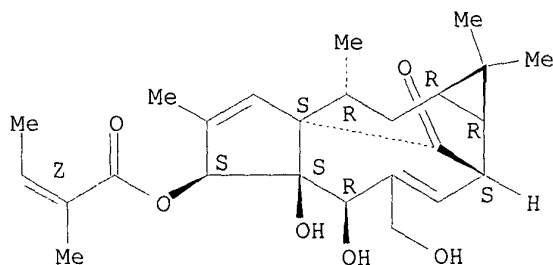
CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-  
1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX  
NAME)



RN 75567-37-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-  
1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-4-(hydroxymethyl)-1,1,7,9-  
tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-  
yl ester, (2Z)- (9CI) (CA INDEX NAME)

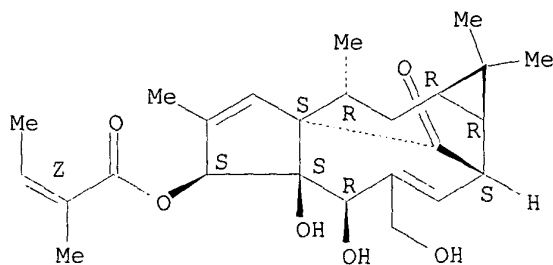
Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



RN 75567-37-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-  
1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-4-(hydroxymethyl)-1,1,7,9-  
tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-  
yl ester, (2Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.

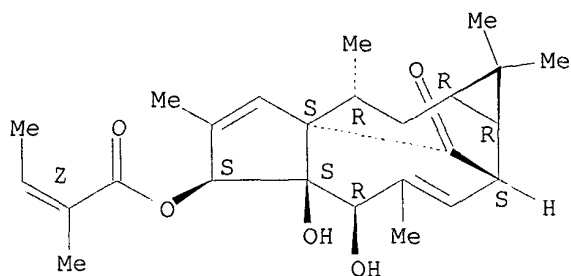


RN 75567-38-3 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-  
1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,4,7,9-pentamethyl-11-oxo-  
1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

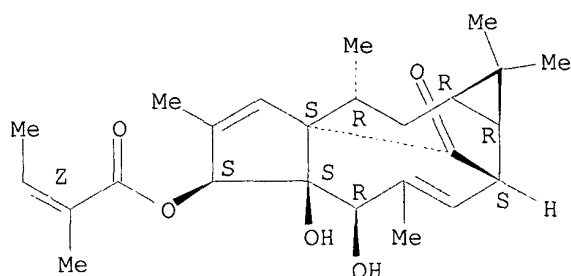
Double bond geometry as shown.



RN 75567-38-3 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,4,7,9-pentamethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

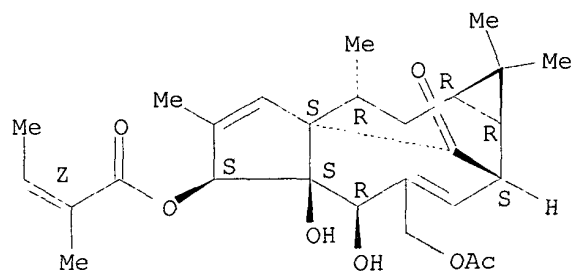
Absolute stereochemistry. Rotation (-).  
Double bond geometry as shown.



RN 82425-35-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.

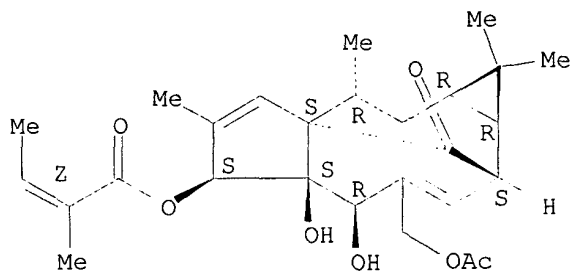


RN 82425-35-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-

yl ester, (2Z)- (9CI) (CA INDEX NAME)

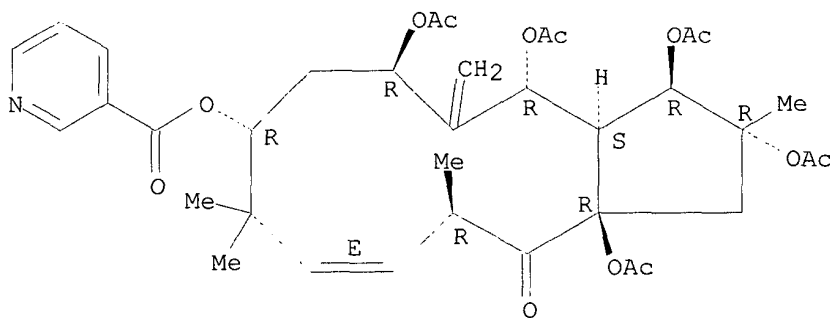
Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

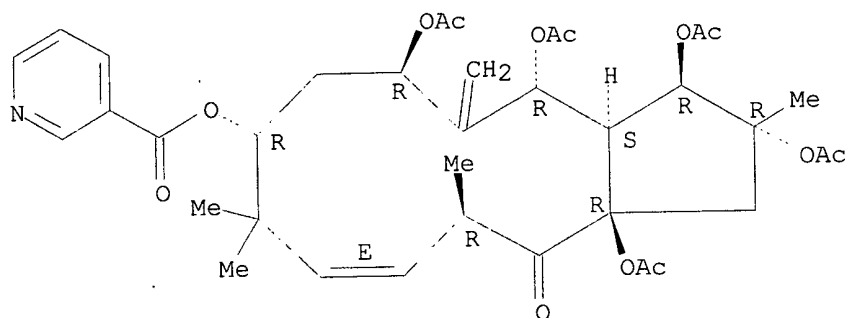
Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



RN 210108-85-3 HCAPLUS

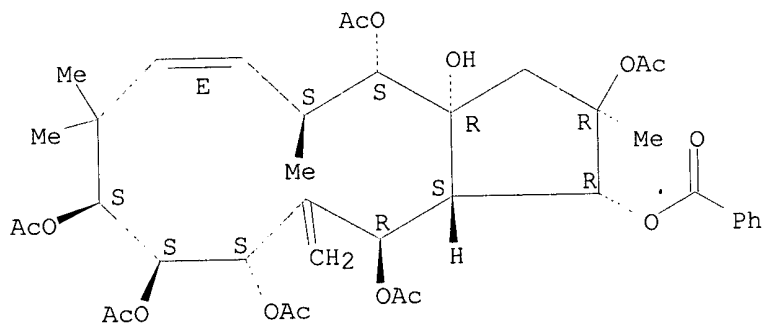
CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



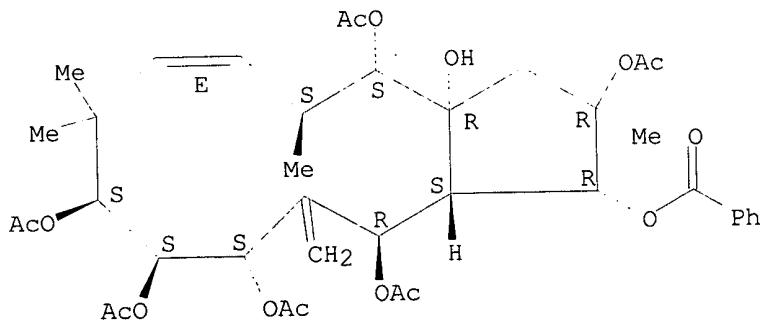
RN 210108-86-4 HCAPLUS  
 CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
 , 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13  
 R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
 Double bond geometry as described by E or Z.



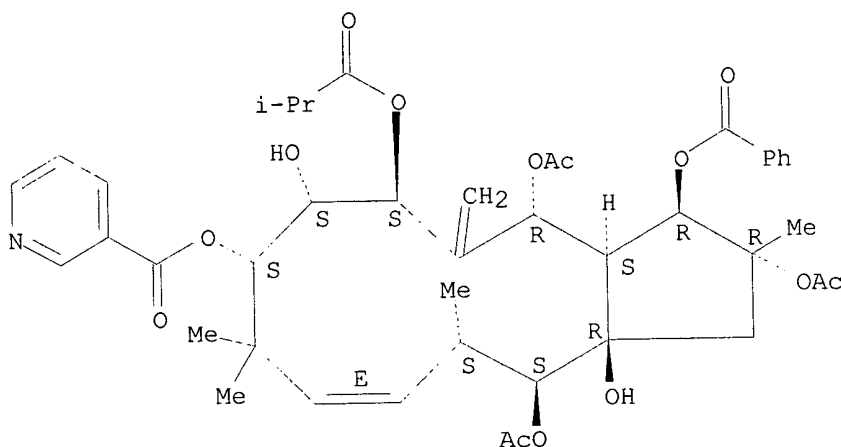
RN 210108-86-4 HCAPLUS  
 CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
 , 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13  
 R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
 Double bond geometry as described by E or Z.



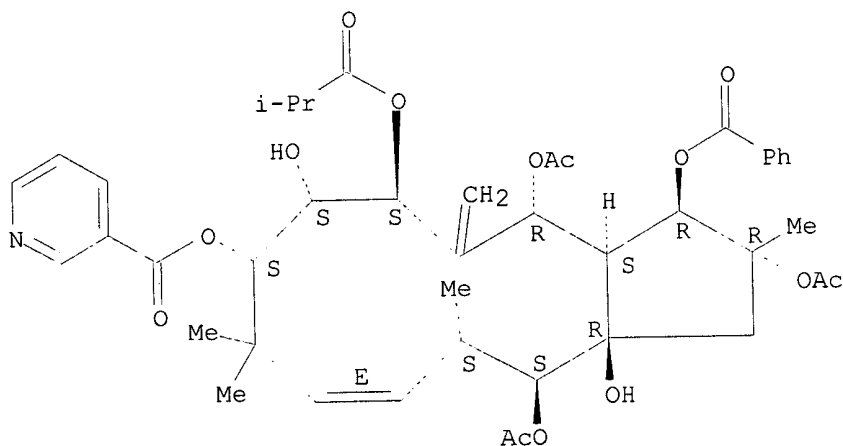
RN 210108-87-5 HCAPLUS  
 CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
 Double bond geometry as described by E or Z.



RN 210108-87-5 HCAPLUS  
 CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

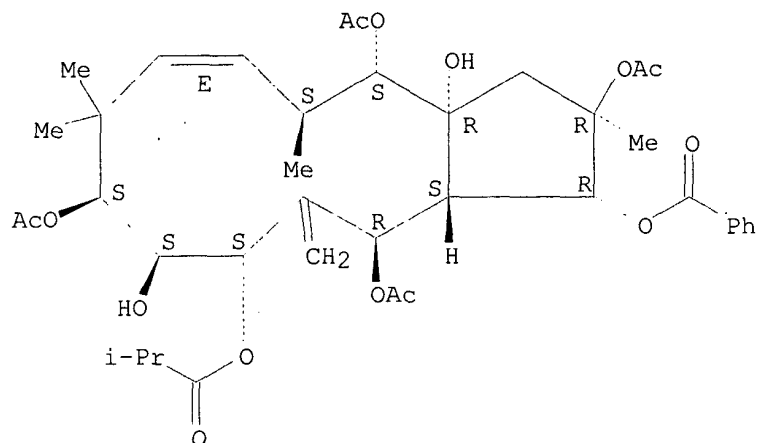
Absolute stereochemistry. Rotation (+).  
 Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS  
 CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)



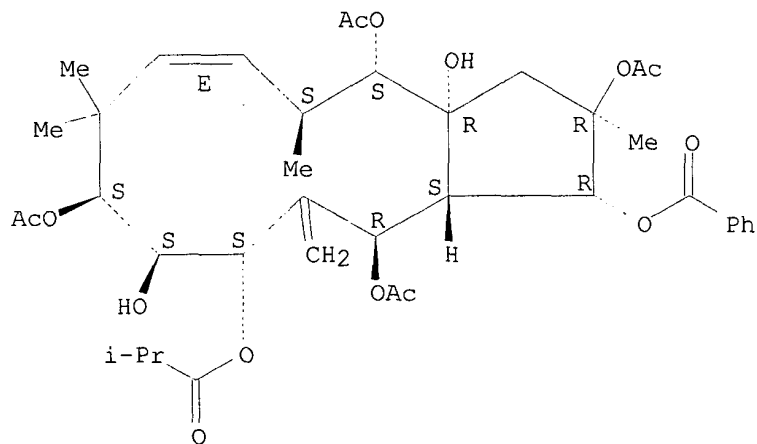
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-  
2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-  
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-  
cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

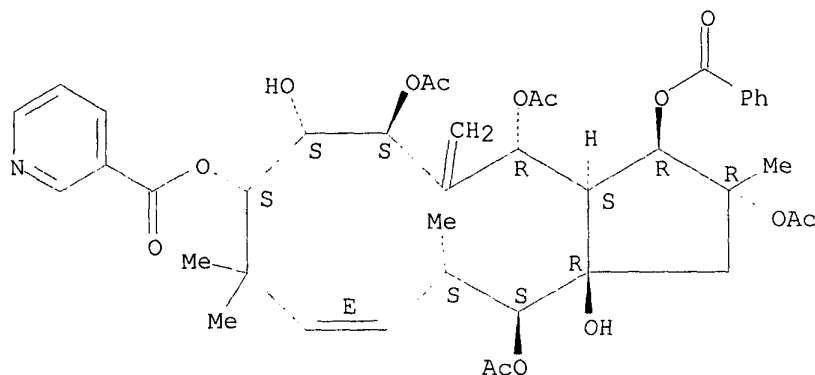
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-  
2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-  
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-  
cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

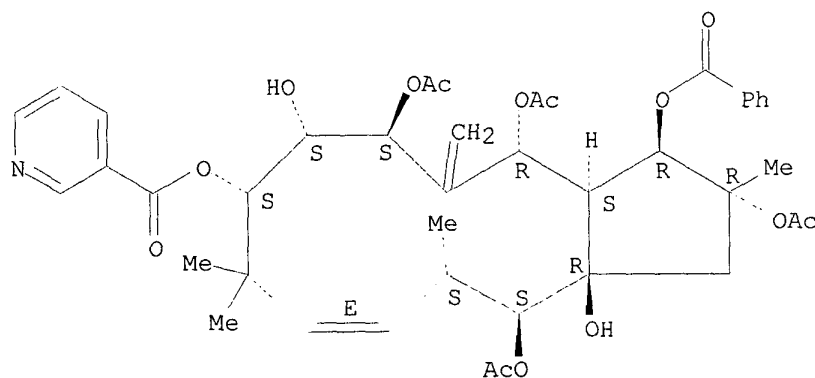
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-  
2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-  
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-  
cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

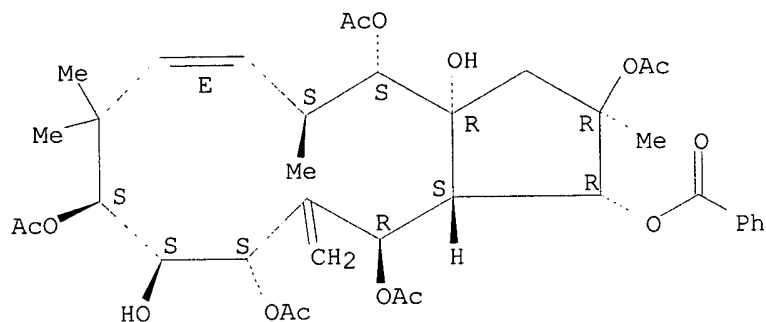
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
, 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,  
13aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as described by E or Z.

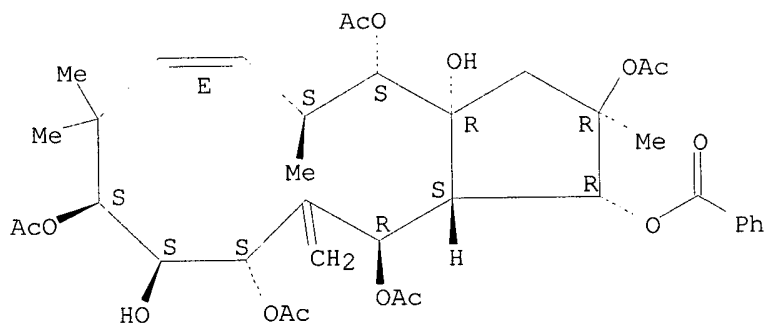


RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
, 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,  
13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

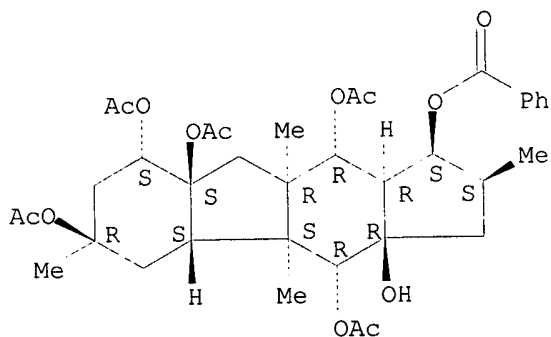
Double bond geometry as described by E or Z.



RN 210108-91-1 HCAPLUS

CN Cyclopenta[b]fluorene-1,3a,4,6,8,8a,10(1H,4H)-heptol, dodecahydro-  
2,4a,6,9a-tetramethyl-, 4,6,8,8a,10-pentaacetate 1-benzoate,  
(1S,2S,3aR,4R,4aS,4bS,6R,8R,8aR,9aR,10R,10aR)- (9CI) (CA INDEX NAME)

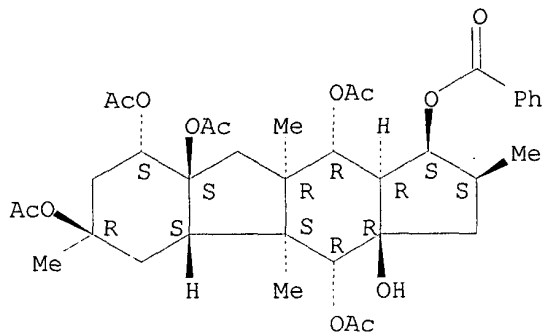
Absolute stereochemistry.



RN 210108-91-1 HCAPLUS

CN Cyclopenta[b]fluorene-1,3a,4,6,8,8a,10(1H,4H)-heptol, dodecahydro-  
2,4a,6,9a-tetramethyl-, 4,6,8,8a,10-pentaacetate 1-benzoate,  
(1S,2S,3aR,4R,4aS,4bS,6R,8R,8aR,9aR,10R,10aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K035-78  
ICS A61K031-455; A61K031-22; A61P035-00  
CC 1-6 (Pharmacology)  
Section cross-reference(s): 11  
ST prostate cancer treatment diterpene Euphorbiaceae  
IT Receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(PSA; diterpenes from Euphorbiaceae for treatment of prostate cancer)  
IT Bone  
(bone-seeking agent; diterpenes from Euphorbiaceae for treatment of  
prostate cancer)  
IT Antibodies  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(conjugates; diterpenes from Euphorbiaceae for treatment of prostate  
cancer)  
IT Acalypha  
Acidoton  
Actinostemon  
Adelia  
Adenocline  
Adenocrepis  
Adenophaedra  
Adisca  
Agrostistachys  
Alchornea  
Alchorneopsis  
Alcinaeanthus  
Alcoceria  
Aleurites  
Amanoa  
Andrachne  
Angostyles  
Anisophyllum  
Antidesma  
Antitumor agents  
Aphora  
Aporosa  
Aporosella  
Argythamnia

Astrococcus  
Astrogyne  
B cell (lymphocyte)  
Baccaurea  
Baliospermum  
Bernardia  
Beyeriopsis  
Bischofia  
Blachia  
Blumeodondron  
Bonania  
Bradleia  
Breynia  
Breyniopsis  
Briedelia  
Buraeavia  
Caperonia  
Caryodendron  
Celianella  
Cephalocroton  
Chaenotheca  
Chaetocarpus  
Cheilosa  
Chiropetalum  
Choriophyllum  
Cicca  
Claoxylon  
Cleidion  
Cleistanthus  
Clutia  
Cnesmone  
Cnidoscolus  
Coccoceras  
Codiaeum  
Coelodiscus  
Conami  
Conceveiba  
Conceveibastrum  
Conceveibum  
Corythea  
Croizatia  
Croton  
Crotonopsis  
Crozophora  
Cubanthus  
Cunuria  
Dactylostemon  
Dalechampia  
Dendritic cell  
Dendrocousinsia  
Diasperus  
Didymocistus  
Dimorphocalyx  
Discocarpus  
Ditaxis  
Dodecastigma  
Drug delivery systems  
Drug targeting  
Drypetes  
Dysopsis

Elateriospermum  
Endadenium  
Endospermum  
Erismanthus  
Erythrocarpus  
Erythrochilus  
Eumecanthus  
Euphorbia  
Euphorbia aaron-rossii  
Euphorbia abbreviata  
Euphorbia acuta  
Euphorbia alatocaulis  
Euphorbia albicaulis  
Euphorbia albomarginata  
Euphorbia alicae  
Euphorbia alta  
Euphorbia anacampseros  
Euphorbia andromedae  
Euphorbia angusta  
Euphorbia anthonyi  
Euphorbia antiguensis  
Euphorbia apocynifolia  
Euphorbia arabica  
Euphorbia ariensis  
Euphorbia arizonica  
Euphorbia arkansana  
Euphorbia arteagae  
Euphorbia arundelana  
Euphorbia astroites  
Euphorbia atrococca  
Euphorbia baselices  
Euphorbia batabanensis  
Euphorbia bergeri  
Euphorbia bermudiana  
Euphorbia bicolor  
Euphorbia biformis  
Euphorbia bifurcata  
Euphorbia bilobata  
Euphorbia biramensis  
Euphorbia biuncialis  
Euphorbia blepharostipula  
Euphorbia blodgetti  
Euphorbia boerhaavioides  
Euphorbia boliviana  
Euphorbia bracei  
Euphorbia brachiata  
Euphorbia brachycera  
Euphorbia brandegeei  
Euphorbia brittonii  
Euphorbia caesia  
Euphorbia calcicola  
Euphorbia campestris  
Euphorbia candelabrum  
Euphorbia capitellata  
Euphorbia carmenensis  
Euphorbia carunculata  
Euphorbia cayensis  
Euphorbia celastroides  
Euphorbia chalicophila  
Euphorbia chamaerrhodos

Euphorbia chamaesula  
Euphorbia chiapensis  
Euphorbia chiogenoides  
Euphorbia cinerascens  
Euphorbia clarionensis  
Euphorbia colimae  
Euphorbia colorata  
Euphorbia commutata  
Euphorbia consoquitlae  
Euphorbia convolvuloides  
Euphorbia corallifera  
Euphorbia creberrima  
Euphorbia crenulata  
Euphorbia cubensis  
Euphorbia cuspidata  
Euphorbia cymbiformis  
Euphorbia darlingtonii  
Euphorbia defoliata  
Euphorbia degeneri  
Euphorbia deltoidea  
Euphorbia dentata  
Euphorbia depressa  
Euphorbia dictyosperma  
Euphorbia dioeca  
Euphorbia discoidalis  
Euphorbia dorsiventralis  
Euphorbia drummondii  
Euphorbia duclouxii  
Euphorbia dussii  
Euphorbia eanophylla  
Euphorbia eggersii  
Euphorbia eglandulosa  
Euphorbia elata  
Euphorbia enalla  
Euphorbia eriogonoides  
Euphorbia eriophylla  
Euphorbia esculaeformis  
Euphorbia espirituensis  
Euphorbia esula  
Euphorbia excisa  
Euphorbia exclusa  
Euphorbia exstipitata  
Euphorbia exstipulata  
Euphorbia fendleri  
Euphorbia filicaulis  
Euphorbia filiformis  
Euphorbia florida  
Euphorbia fruticulosa  
Euphorbia garberi  
Euphorbia gaumerii  
Euphorbia gerardiana  
Euphorbia geyeri  
Euphorbia glyptosperma  
Euphorbia gorgonis  
Euphorbia gracilior  
Euphorbia gracillima  
Euphorbia gradyi  
Euphorbia graminea  
Euphorbia grisea  
Euphorbia guadalajarana

Euphorbia guanarensis  
 Euphorbia gymnadenia  
 Euphorbia haematantha  
 Euphorbia hedyotoides  
 Euphorbia heldrichii  
 Euphorbia helenae  
 Euphorbia helleri  
 Euphorbia helwigii  
 Euphorbia henricksonii  
 Euphorbia heterophylla  
 Euphorbia hexagona  
 Euphorbia hexagonoides  
 Euphorbia hinkleyorum  
 Euphorbia hintonii  
 Euphorbia hirta  
 Euphorbia hirtula  
 Euphorbia hooveri  
 Euphorbia humistrata  
 Euphorbia hypericifolia  
 Euphorbia inundata  
 Euphorbia involuta  
 Euphorbia jaliscensis  
 Euphorbia jejuna  
 Euphorbia johnstonii  
 Euphorbia juttae  
 Euphorbia knuthii  
 Euphorbia lasiocarpa  
 Euphorbia lata  
 Euphorbia latazi  
 Euphorbia latericolor  
 Euphorbia laxiflora  
 Euphorbia lecheoides  
 Euphorbia ledienii  
 Euphorbia leucophylla  
 Euphorbia lineata  
 Euphorbia linguiformis  
 Euphorbia longecornuta  
 Euphorbia longepetiolata  
 Euphorbia longeramosa  
 Euphorbia longinsulicola

(diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT Euphorbia longipila  
 Euphorbia lupulina  
 Euphorbia lurida  
 Euphorbia lycioides  
 Euphorbia macropodoides  
 Euphorbia macvaughiana  
 Euphorbia manca  
 Euphorbia mandoniana  
 Euphorbia mangleti  
 Euphorbia mango  
 Euphorbia marylandica  
 Euphorbia mayana  
 Euphorbia melanadenia  
 Euphorbia melanocarpa  
 Euphorbia meridensis  
 Euphorbia mertonii  
 Euphorbia mexiae  
 Euphorbia microcephala  
 Euphorbia microclada



Euphorbia micromera  
Euphorbia misella  
Euphorbia missurica  
Euphorbia montana  
Euphorbia montereyana  
Euphorbia multicaulis  
Euphorbia multififormis  
Euphorbia multinodis  
Euphorbia multiseta  
Euphorbia muscicola  
Euphorbia neomexicana  
Euphorbia nephradenia  
Euphorbia niqueroana  
Euphorbia oaxacana  
Euphorbia occidentalis  
Euphorbia odontodenia  
Euphorbia olivacea  
Euphorbia olowaluana  
Euphorbia ophthalmica  
Euphorbia ovata  
Euphorbia pachypoda  
Euphorbia pachyrhiza  
Euphorbia padifolia  
Euphorbia palmeri  
Euphorbia paludicola  
Euphorbia paralias  
Euphorbia parishii  
Euphorbia parryi  
Euphorbia parviflora  
Euphorbia paxiana  
Euphorbia pediculifera  
Euphorbia peplidion  
Euphorbia peploides  
Euphorbia peplus  
Euphorbia pergamena  
Euphorbia perlignea  
Euphorbia petaloidea  
Euphorbia petrina  
Euphorbia picachensis  
Euphorbia pilosula  
Euphorbia pinariona  
Euphorbia pinctorum  
Euphorbia pionsperma  
Euphorbia platysperma  
Euphorbia plicata  
Euphorbia poeppigii  
Euphorbia poliosperma  
Euphorbia polycarpa  
Euphorbia polycnemoides  
Euphorbia polyphylla  
Euphorbia portoricensis  
Euphorbia portulacoides  
Euphorbia portulana  
Euphorbia preslii  
Euphorbia prostrata  
Euphorbia pteroneura  
Euphorbia pycnanthema  
Euphorbia ramosa  
Euphorbia rapulum  
Euphorbia remyi

Euphorbia retroscabra  
Euphorbia revoluta  
Euphorbia rivularis  
Euphorbia robusta  
Euphorbia rubida  
Euphorbia rubrosperma  
Euphorbia rupicola  
Euphorbia sanmartensis  
Euphorbia saxatilis  
Euphorbia schizoloba  
Euphorbia sclerocyathium  
Euphorbia scopulorum  
Euphorbia senilis  
Euphorbia serpyllifolia  
Euphorbia serrula  
Euphorbia setiloba  
Euphorbia sonorae  
Euphorbia soobyi  
Euphorbia sparsiflora  
Euphorbia sphaerosperma  
Euphorbia spruceana  
Euphorbia stellata  
Euphorbia subcoerulea  
Euphorbia submamillaris  
Euphorbia subpeltata  
Euphorbia subpubens  
Euphorbia subreniforme  
Euphorbia subtrifoliata  
Euphorbia succedanea  
Euphorbia syphilitica  
Euphorbia tamaulipasana  
Euphorbia telephioides  
Euphorbia tenuissima  
Euphorbia tetrapora  
Euphorbia tirucalli  
Euphorbia tomentella  
Euphorbia tomentosa  
Euphorbia torralbasii  
Euphorbia tovarensis  
Euphorbia trachysperma  
Euphorbia tricolor  
Euphorbia troyana  
Euphorbia tuerckheimii  
Euphorbia turczaninowii  
Euphorbia umbellulata  
Euphorbia undulata  
Euphorbia vermiformis  
Euphorbia versicolor  
Euphorbia villifera  
Euphorbia violacea  
Euphorbia whitei  
Euphorbia xanti  
Euphorbia xylopoda  
Euphorbia yayalesia  
Euphorbia yungasensis  
Euphorbia zeravschanica  
Euphorbia zinniiflora  
Euphorbiaceae  
Euphorbiodendron  
Excoecaria

Fluggea  
Garcia  
Gavarretia  
Gelonium  
Gitara  
Givotia  
Glochidion  
Glochidionopsis  
Glycydendron  
Gymnanthes  
Gymnosporia  
Haematospermum  
Hendecandras  
Hevea  
Hieronima  
Hippocrepantha  
Homalanthus  
Hymenocardia  
Immunostimulants  
Janipha  
Jatropha  
Julocroton  
Lasiocroton  
Leiocarpus  
Leonardia  
Lepidanthus  
Leucocroton  
Mabea  
Macaranga  
Macrocroton  
Mallotus (plant)  
Manihot  
Mappa  
Maprounea  
Melanthesa  
Mercurialis  
Mettenia  
Micrandra  
Microdesmis  
Microelus  
Microstachys  
Monadenium  
Mozinna  
Neoscortechinia  
Omalthus  
Omphalea  
Ophellantha  
Orbicularia  
Ostodes  
Oxydectes  
Palenga  
Pantadenia  
Paradrypetes  
Pausandra  
Pedilanthus  
Pera  
Peridium  
Petalostigma  
Phyllanthus  
Picrodendron

- Pierardia
- Pilinophytum
- Pimeleodendron
- Piranhea
- Platygyyna
- Plukenetia
- Podocalyx
- Poinsettia
- Poraresia
- Prosartema
- Pseudanthus
- Pycnocomma
- Quadrasia
- Reverchonia
- Richeria
- Richeriella
- Ricinella
- Ricinocarpos
- Rottlera
- Sagotia
- Sandwithia
- Sapium
- Savia
- Sclerocroton
- Sebastiania
- Securinega
- Senefeldera
- Serophyton
- Siphonia
- Spathiostemon
- Spixia
- Stillingia
- Strophoblachia
- Synadenium
- T cell (lymphocyte)
- Tetracoccus
- Tetraplandra
- Tetrorchidium
- Thyrsanthera
- Tithymalus
- Tragia
- Trewia
- Trigonostemon
- Tyria
- Xylophylla
- (diterpenes from Euphorbiaceae for treatment of prostate cancer)
- IT Immunoglobulins
- Prostate-specific antigen
- RL: BSU (Biological study, unclassified); BIOL (Biological study)
- (diterpenes from Euphorbiaceae for treatment of prostate cancer)
- IT Diterpenes
- RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
- (diterpenes from Euphorbiaceae for treatment of prostate cancer)
- IT Prostate gland
- (neoplasm, inhibitors; diterpenes from Euphorbiaceae for treatment of prostate cancer)
- IT Prostate gland
- (neoplasm, prostate-specific tumor marker; diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT Antitumor agents  
 (prostate gland; diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT Antigens  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (prostate-specific membrane antigen (PMSA); diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT Drug interactions  
 (synergistic; diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT 13598-36-2D, Phosphonic acid, alkylidenebis- derivs.  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (Bisphosphonate; diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT 1984-15-2 15663-27-1, Cisplatin 38937-66-5  
 67707-88-4, Ingenane 67707-88-4D,  
 Ingenane, derivs. 75567-37-2 75567-37-2D,  
 derivs. 75567-38-3 75567-38-3D, derivs.  
 82425-35-2 82425-35-2D, derivs. 210108-85-3,  
 Jatrophane 1 210108-85-3D, Jatrophane 1, derivs.  
 210108-86-4, Jatrophane 2 210108-86-4D, Jatrophane 2,  
 derivs. 210108-87-5, Jatrophane 3 210108-87-5D,  
 Jatrophane 3, derivs. 210108-88-6, Jatrophane 4  
 210108-88-6D, Jatrophane 4, derivs. 210108-89-7,  
 Jatrophane 5 210108-89-7D, Jatrophane 5, derivs.  
 210108-90-0, Jatrophane 6 210108-90-0D, Jatrophane 6,  
 derivs. 210108-91-1, Pepluane 210108-91-1D, Pepluane,  
 derivs.  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (diterpenes from Euphorbiaceae for treatment of prostate cancer)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2001:903883 HCAPLUS  
 DOCUMENT NUMBER: 136:31680  
 TITLE: Euphorbiaceae macrocyclic diterpenes for the treatment of inflammation  
 INVENTOR(S): Aylward, James Harrison; Parsons, Peter Gordon; Suhrbier, Andreas; Turner, Kathleen Anne  
 PATENT ASSIGNEE(S): Peplin Research Pty. Ltd., Australia  
 SOURCE: PCT Int. Appl., 172 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001093885	A1	20011213	WO 2001-AU680	20010607
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 752435	B2	20020919	AU 2001-63662	20010607
PRIORITY APPLN. INFO.:			AU 2000-8017	A 20000607
			WO 2001-AU680	W 20010607

OTHER SOURCE(S): MARPAT 136:31680

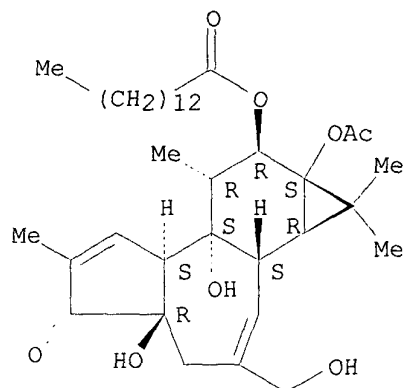
AB The invention relates generally to chem. agents useful in the treatment and prophylaxis of inflammatory conditions or in the amelioration of symptoms resulting from or facilitated by an inflammatory condition in a mammalian animal, including humans and primates, non-mammalian animal, and avian species. More particularly, the invention provides a chem. agent of the macrocyclic diterpene family obtaining from a member of the Euphorbiaceae family of plants or botanical or horticultural relatives thereof or derivs. or chem. analogs or chem. synthetic forms of the agents for use in the treatment or prophylaxis of an inflammatory condition or in the amelioration of symptoms resulting from or facilitated by an inflammatory condition in a mammal, animal or avian species. The invention further provides a method for the prophylaxis or treatment of mammalian, animal or avian subjects for inflammatory conditions including chronic or transitory inflammatory conditions or for ameliorating the symptoms of an inflammatory condition by the topical or systemic administration of a macrocyclic diterpene obtainable from a member of the Euphorbiaceae family or botanical or horticultural relatives thereof or a deriv., chem. analog or chem. synthetic form of the agent. The chem. agent of the invention may be in the form of a purified compd., mixt. of compds., a precursor form of one or more of the compds. capable of chem. transformation into a therapeutically active agent, or be in the form of a chem. fraction, sub-fraction, or prepn. or ext. of the plant.

IT 16561-29-8, Pma 37558-16-0, Phorbol dibutyrate  
 141436-78-4, Protein kinase C

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (Euphorbiaceae macrocyclic diterpene for inflammation treatment)

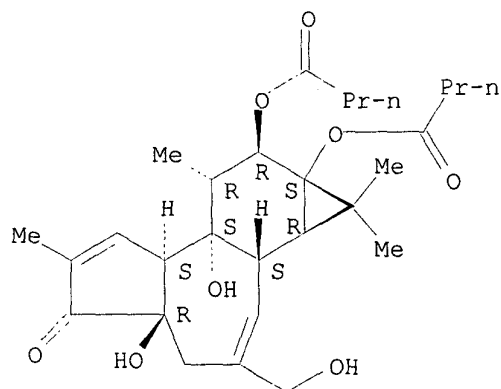
RN 16561-29-8 HCAPLUS  
 CN Tetradecanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-9a-(acetyloxy)-  
 1a,1b,4,4a,5,7a,7b,8,9,9a-decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-  
 1,1,6,8-tetramethyl-5-oxo-1H-cyclopropa[3,4]benz[1,2-e]azulen-9-yl ester  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 37558-16-0 HCAPLUS  
 CN Butanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-1,1a,1b,4,4a,5,7a,7b,8,9-  
 decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-1,1,6,8-tetramethyl-5-oxo-9aH-  
 cyclopropa[3,4]benz[1,2-e]azulene-9,9a-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 141436-78-4 HCAPLUS  
 CN Kinase (phosphorylating), protein, C (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

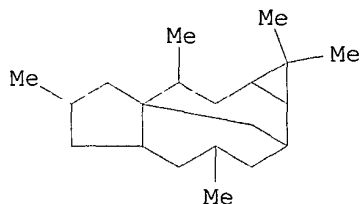
IT 67707-88-4, Ingenane 67707-88-4D,  
 Ingenane, derivs. 75567-37-2 82425-35-2  
 210108-85-3, Jatrophane 1 210108-85-3D, Jatrophane 1,  
 derivs. 210108-86-4, Jatrophane 2 210108-86-4D,  
 Jatrophane 2, derivs. 210108-87-5, Jatrophane 3  
 210108-87-5D, Jatrophane 3, derivs. 210108-88-6,  
 Jatrophane 4 210108-88-6D, Jatrophane 4, derivs.

210108-89-7, Jatrophane 5 210108-89-7D, Jatrophane 5,  
 derivs. 210108-90-0, Jatrophane 6 210108-90-0D,  
 Jatrophane 6, derivs.

RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU  
 (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)  
 (Euphorbiaceae macrocyclic diterpene for inflammation treatment)

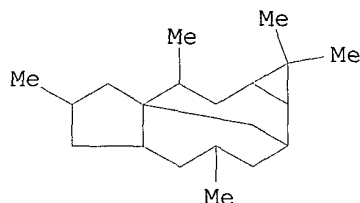
RN 67707-88-4 HCAPLUS

CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-  
 1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX  
 NAME)



RN 67707-88-4 HCAPLUS

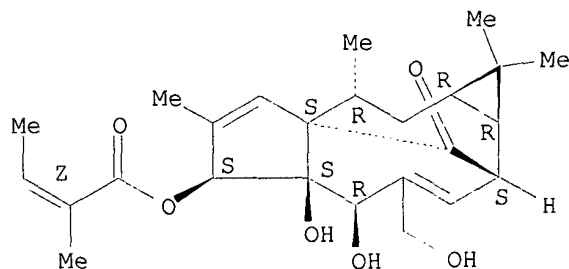
CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-  
 1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX  
 NAME)



RN 75567-37-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-  
 1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-4-(hydroxymethyl)-1,1,7,9-  
 tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-  
 yl ester, (2Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
 Double bond geometry as shown.

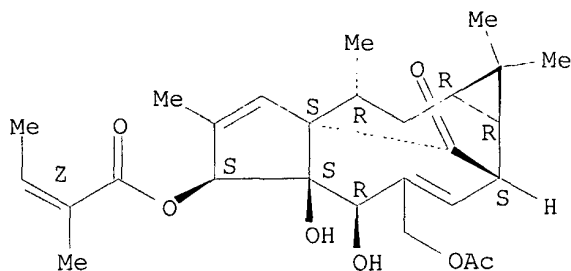


RN 82425-35-2 HCAPLUS



CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

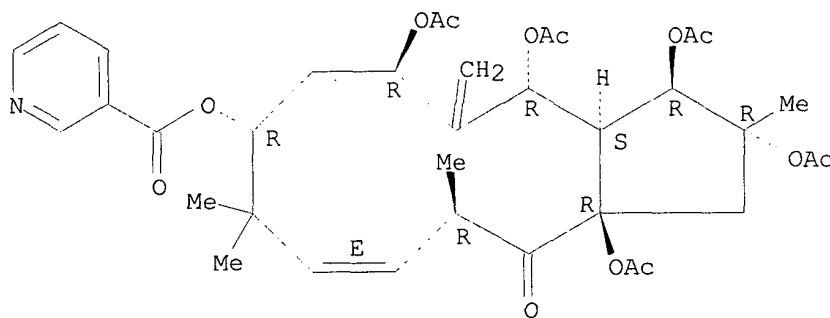
Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

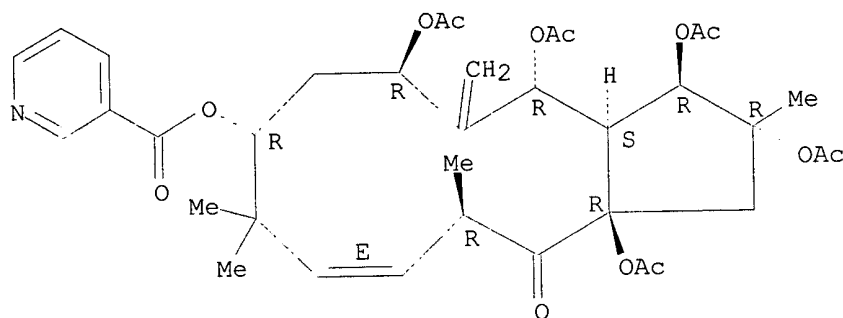
Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



RN 210108-85-3 HCAPLUS

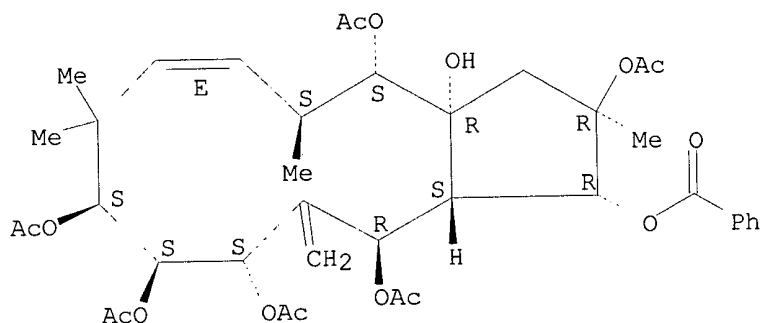
CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



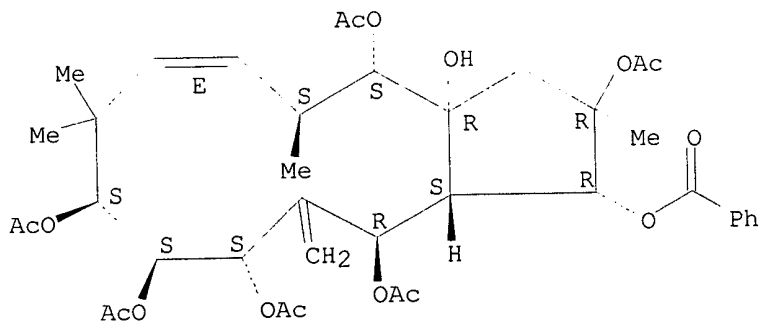
RN 210108-86-4 HCAPLUS  
 CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
 , 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13  
 R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
 Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS  
 CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
 , 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13  
 R,13aS)- (9CI) (CA INDEX NAME)

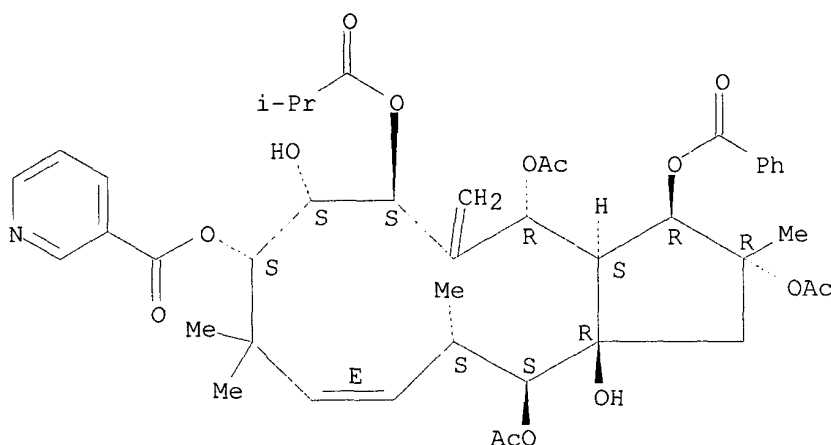
Absolute stereochemistry. Rotation (-).  
 Double bond geometry as described by E or Z.



RN 210108-87-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

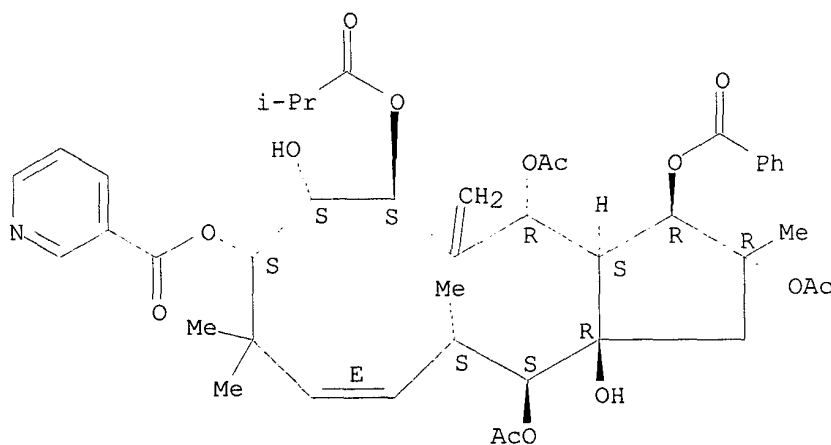
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-87-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

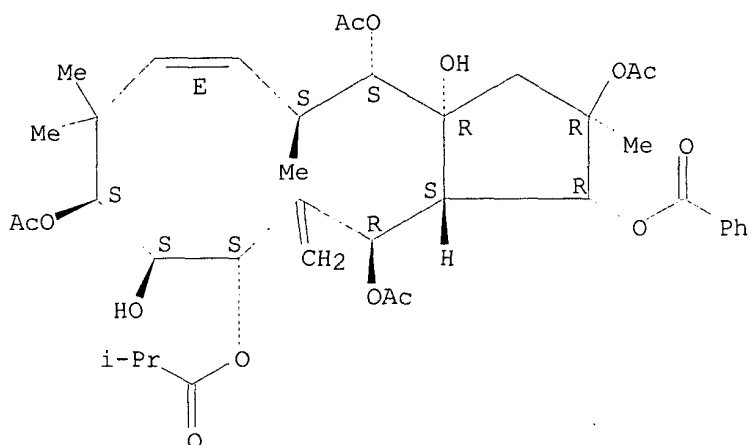
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

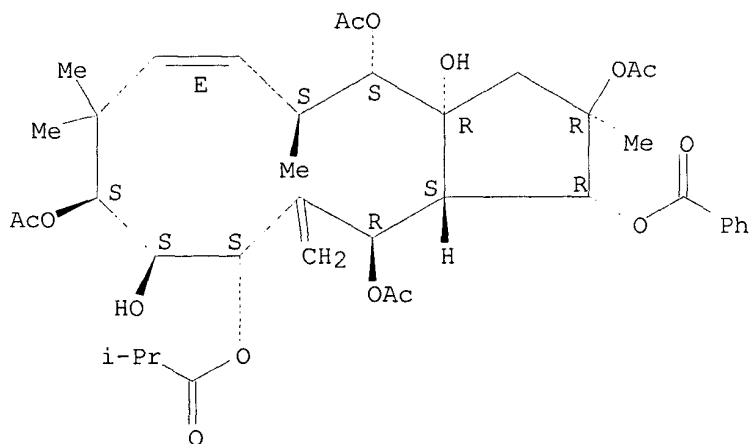
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-  
2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-  
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-  
cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

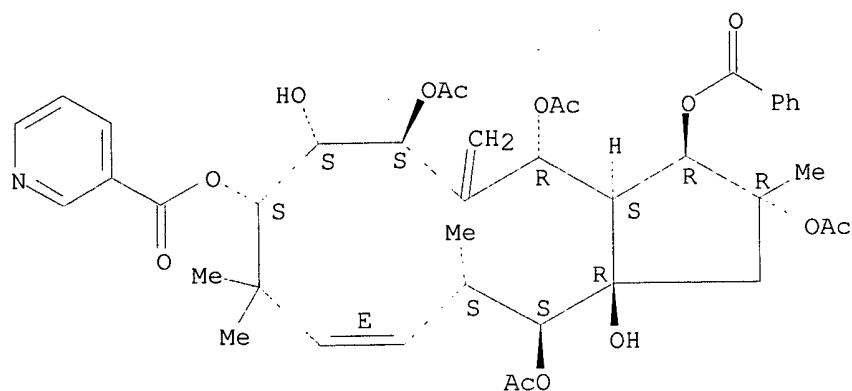
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-  
2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-  
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-  
cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

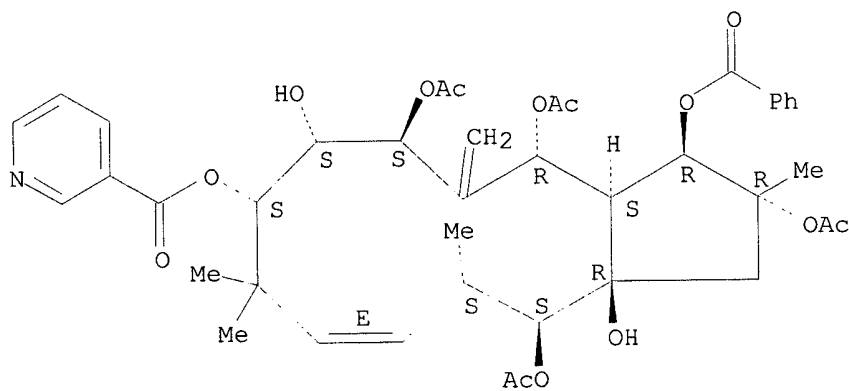
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

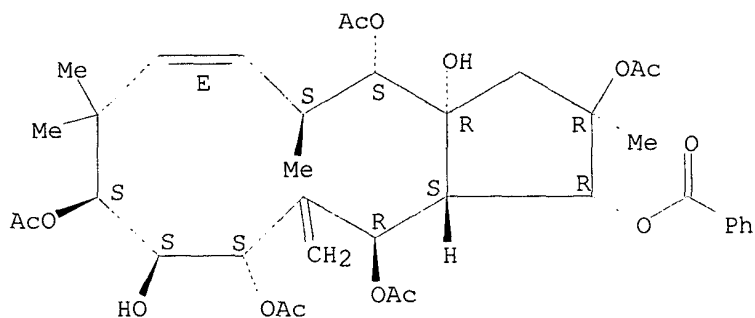
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol, 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as described by E or Z.

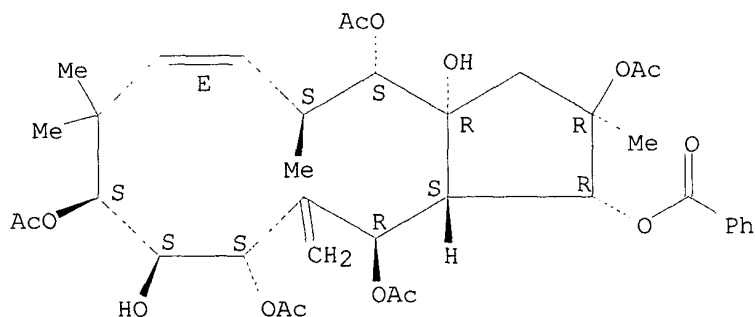


RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
, 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,  
13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.



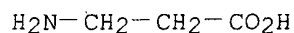
IT 107-95-9, .beta.-Alanine 515-25-3 590-46-5,

Betaine hydrochloride

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(carrier; Euphorbiaceae macrocyclic diterpene for inflammation  
treatment)

RN 107-95-9 HCAPLUS

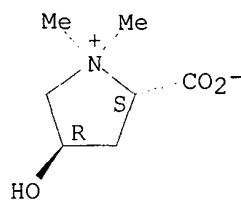
CN .beta.-Alanine (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 515-25-3 HCAPLUS

CN Pyrrolidinium, 2-carboxy-4-hydroxy-1,1-dimethyl-, inner salt, (2S,4R)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 590-46-5 HCAPLUS

CN Methanaminium, 1-carboxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

 $\text{Me}_3^+\text{N}-\text{CH}_2-\text{CO}_2\text{H}$ ●  $\text{Cl}^-$ 

IC ICM A61K035-78  
ICS A61K031-455; A61K031-22; A61P031-02; G06F019-00  
CC 1-7 (Pharmacology)  
Section cross-reference(s): 11  
ST Euphorbiaceae macrocyclic diterpene antiinflammatory  
IT Promoter (genetic element)  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(CMV; Euphorbiaceae macrocyclic diterpene for inflammation treatment)

IT Acalypha  
Acidoton  
Actinostemon  
Adelia  
Adenocline  
Adenocrepis  
Adenophaedra  
Adenoviridae  
Adisca  
Agrostistachys  
Alchornea  
Alchorneopsis  
Alcinaeanthus  
Alcoceria  
Aleurites  
Amanoa  
Amoeba  
Andrachne  
Angostyles  
Anisophyllum  
Anti-infective agents  
Anti-inflammatory agents  
Antibacterial agents  
Antidesma  
Antiviral agents  
Aphora  
Aporosa  
Aporosella  
Arachnida  
Arbovirus

Argythamnia  
 Aspergillus  
 Astrococcus  
 Astrogyne  
 Baccaurea  
 Bacillus anthracis  
 Balantidium coli  
 Baliospermum  
 Bernardia  
 Beyeriosis  
 Bischofia  
 Blachia  
 Blastomyces dermatitidis  
 Blumeodondron  
 Bonania  
 Bordetella  
 Bordetella pertussis  
 Borrelia  
 Borrelia burgdorferi  
 Bradleia  
 Breynia  
 Breyniosis  
 Briedelia  
 Buraeavia  
 Caletia  
 Candida albicans  
 Caperonia  
 Caryodendron  
 Celianella  
 Cephalocroton  
 Chaenotheca  
 Chaetocarpus  
 Cheilosa  
 Chiropetalum  
 Chlamydia  
 Chlamydia trachomatis  
 Choriophyllum  
 Cicca  
 Cleidion  
 Cleistanthus  
 Clostridium  
 Clostridium botulinum  
 Clostridium perfringens  
 Clostridium tetani  
 Clutia  
 Cnesmone  
 Cnidoscolus  
 Coccoceras  
 Codiaeum  
 Coelodiscus  
 Computer application  
 Computer program  
 Conami  
 Conceveiba  
 Conceveibastrum  
 Conceveibum  
 Corynebacterium  
 Corynebacterium diphtheriae  
 Corythea  
 Croizatia



Croton  
Crotonopsis  
Crozophora  
Cryptococcus neoformans  
Cryptosporidium  
Cubanthus  
Cunuria  
Cytomegalovirus  
Dactylostemon  
Dalechampia  
Dendrocousinsia  
Diasperus  
Didymocistus  
Dimorphocalyx  
Discocarpus  
Ditaxis  
Dodecastigma  
Drug delivery systems  
Drug screening  
Drypetes  
Dysopsis  
Elateriospermum  
Endadenium  
Endadenium gossweileri  
Endospermum  
Entamoeba histolytica  
Erismanthus  
Erythrocarpus  
Erythrochilus  
Escherichia  
Escherichia coli  
Eumecanthus  
Euphorbia  
Euphorbia aaron-rossii  
Euphorbia abbreviata  
Euphorbia acuta  
Euphorbia alatocaulis  
Euphorbia albicaulis  
Euphorbia albomarginata  
Euphorbia aliceae  
Euphorbia alta  
Euphorbia anacampseros  
Euphorbia andromedae  
Euphorbia angusta  
Euphorbia antiquensis  
Euphorbia apocynifolia  
Euphorbia arabica  
Euphorbia ariensis  
Euphorbia arizonica  
Euphorbia arkansana  
Euphorbia arteagae  
Euphorbia arundelana  
Euphorbia astroites  
Euphorbia atrococca  
Euphorbia baselices  
Euphorbia batabanensis  
Euphorbia bergeri  
Euphorbia bermudiana  
Euphorbia bicolor  
Euphorbia biformis

Euphorbia bifurcata  
Euphorbia bilobata  
Euphorbia biramensis  
Euphorbia biuncialis  
Euphorbia blepharostipula  
Euphorbia blodgetti  
Euphorbia boerhaavioides  
Euphorbia boliviana  
Euphorbia bracei  
Euphorbia brachiata  
Euphorbia brachycera  
Euphorbia brandegeei  
Euphorbia brittonii  
Euphorbia caesia  
Euphorbia calcicola  
Euphorbia campestris  
Euphorbia candelabrum  
Euphorbia capitellata  
Euphorbia carmenensis  
Euphorbia carunculata  
Euphorbia cayensis  
Euphorbia celastroides  
Euphorbia chalicophila  
Euphorbia chamaerrhodos  
Euphorbia chamaesula  
Euphorbia chiapensis  
Euphorbia chiogenoides  
Euphorbia cinerascens  
Euphorbia clarionensis  
Euphorbia colimae  
Euphorbia colorata  
Euphorbia commutata  
Euphorbia consoquitlae  
Euphorbia convolvuloides  
Euphorbia corallifera  
Euphorbia creberrima  
Euphorbia crenulata  
Euphorbia cubensis  
Euphorbia cuspidata  
Euphorbia cymbiformis  
Euphorbia darlingtonii  
Euphorbia defoliata  
Euphorbia degeneri  
Euphorbia deltoidea  
Euphorbia dentata  
Euphorbia depressa  
Euphorbia dictyosperma  
Euphorbia dioeca  
Euphorbia discoidalis  
Euphorbia dorsiventralis  
Euphorbia drummondii  
Euphorbia duclouxii  
Euphorbia dussii  
Euphorbia eanophylla  
Euphorbia eggertii  
Euphorbia eglandulosa  
Euphorbia elata  
Euphorbia enalla  
Euphorbia eriogonoides  
Euphorbia eriophylla

Euphorbia esculaeformis  
 Euphorbia espirituensis  
 Euphorbia esula  
 Euphorbia excisa  
 Euphorbia exclusiva  
 Euphorbia exstipitata  
 Euphorbia exstipulata  
 Euphorbia fendleri  
 Euphorbia filicaulis  
 Euphorbia filiformis  
 Euphorbia florida  
 Euphorbia fruticulosa  
 Euphorbia garberi  
 Euphorbia gaumerii  
 Euphorbia gerardiana  
 Euphorbia geyeri  
 Euphorbia glyptosperma  
 Euphorbia gorgonis  
 Euphorbia gracilior  
 Euphorbia gracillima  
 Euphorbia gradyi  
 Euphorbia graminea  
 Euphorbia grisea  
 Euphorbia guadalajarana  
 Euphorbia guanarensis  
 Euphorbia gymnadenia  
 Euphorbia haematantha  
 Euphorbia hedyotoides  
 Euphorbia heldrichii  
 Euphorbia helenae  
 Euphorbia helleri  
 Euphorbia helwigii  
 Euphorbia henricksonii  
 Euphorbia heterophylla

(Euphorbiaceae macrocyclic diterpene for inflammation treatment)

IT Euphorbia hexagona  
 Euphorbia hexagonoides  
 Euphorbia hinkleyorum  
 Euphorbia hintonii  
 Euphorbia hirta  
 Euphorbia hirtula  
 Euphorbia hooveri  
 Euphorbia humistrata  
 Euphorbia hypericifolia  
 Euphorbia inundata  
 Euphorbia involuta  
 Euphorbia jaliscensis  
 Euphorbia jejuna  
 Euphorbia johnstonii  
 Euphorbia juttae  
 Euphorbia knuthii  
 Euphorbia lasiocarpa  
 Euphorbia lata  
 Euphorbia latazi  
 Euphorbia latericolor  
 Euphorbia laxiflora  
 Euphorbia lecheoides  
 Euphorbia ledienii  
 Euphorbia leucophylla  
 Euphorbia lineata

Euphorbia linguiformis  
Euphorbia longecornuta  
Euphorbia longepetiolata  
Euphorbia longeramosa  
Euphorbia longinsulicola  
Euphorbia longipila  
Euphorbia lupulina  
Euphorbia lurida  
Euphorbia lycioides  
Euphorbia macropodoides  
Euphorbia macvaughiana  
Euphorbia manca  
Euphorbia mandoniana  
Euphorbia mangleti  
Euphorbia mango  
Euphorbia marylandica  
Euphorbia mayana  
Euphorbia melanadenia  
Euphorbia melanocarpa  
Euphorbia meridensis  
Euphorbia mertonii  
Euphorbia mexiae  
Euphorbia microcephala  
Euphorbia microclada  
Euphorbia micromera  
Euphorbia misella  
Euphorbia missurica  
Euphorbia montana  
Euphorbia montereyana  
Euphorbia multicaulis  
Euphorbia multiformis  
Euphorbia multinodis  
Euphorbia multiseta  
Euphorbia muscicola  
Euphorbia neomexicana  
Euphorbia nephradenia  
Euphorbia niqueroana  
Euphorbia oaxacana  
Euphorbia occidentalis  
Euphorbia odontodenia  
Euphorbia olivacea  
Euphorbia olowaluana  
Euphorbia ophthalmica  
Euphorbia ovata  
Euphorbia pachypoda  
Euphorbia pachyrhiza  
Euphorbia padifolia  
Euphorbia palmeri  
Euphorbia paludicola  
Euphorbia parishii  
Euphorbia parryi  
Euphorbia parviflora  
Euphorbia paxiana  
Euphorbia pediculifera  
Euphorbia peplidion  
Euphorbia peploides  
Euphorbia peplus  
Euphorbia pergamena  
Euphorbia perlignea  
Euphorbia petaloidea

Euphorbia petrina  
Euphorbia picachensis  
Euphorbia pilosula  
Euphorbia pinariona  
Euphorbia pinctorum  
Euphorbia pionsperma  
Euphorbia platysperma  
Euphorbia plicata  
Euphorbia poeppigii  
Euphorbia poliosperma  
Euphorbia polycarpa  
Euphorbia polycnemoides  
Euphorbia polyphylla  
Euphorbia portoricensis  
Euphorbia portulacoides  
Euphorbia portulana  
Euphorbia preslii  
Euphorbia prostrata  
Euphorbia pteroneura  
Euphorbia pycnanthema  
Euphorbia ramosa  
Euphorbia rapulum  
Euphorbia remyi  
Euphorbia retroscabra  
Euphorbia revoluta  
Euphorbia rivularis  
Euphorbia robusta  
Euphorbia rubida  
Euphorbia rubrosperma  
Euphorbia rupicola  
Euphorbia sanmartensis  
Euphorbia saxatilis  
Euphorbia schizoloba  
Euphorbia sclerocyathium  
Euphorbia scopulorum  
Euphorbia senilis  
Euphorbia serpyllifolia  
Euphorbia serrula  
Euphorbia setiloba  
Euphorbia sonora  
Euphorbia soobyi  
Euphorbia sparsiflora  
Euphorbia sphaerosperma  
Euphorbia spruceana  
Euphorbia stellata  
Euphorbia subcoerulea  
Euphorbia submammilaris  
Euphorbia subpeltata  
Euphorbia subpubens  
Euphorbia subreniforme  
Euphorbia subtrifoliata  
Euphorbia succedanea  
Euphorbia syphilitica  
Euphorbia tamaulipasana  
Euphorbia telephioides  
Euphorbia tenuissima  
Euphorbia tetrapora  
Euphorbia tirucalli  
Euphorbia tomentella  
Euphorbia tomentosa

Euphorbia torralbasii  
Euphorbia towarensis  
Euphorbia trachysperma  
Euphorbia tricolor  
Euphorbia troyana  
Euphorbia tuerckheimii  
Euphorbia turczaninowii  
Euphorbia umbellulata  
Euphorbia undulata  
Euphorbia vermiformis  
Euphorbia versicolor  
Euphorbia villifera  
Euphorbia violacea  
Euphorbia whitei  
Euphorbia xanti  
Euphorbia xylopoda  
Euphorbia yayalesia  
Euphorbia yungasensis  
Euphorbia zeravschanica  
Euphorbia zinniiflora  
Euphorbiaceae  
Euphorbiodendron  
Excoecaria  
Fluggea  
Fungicides  
Garcia  
Gavarretia  
Gelonium  
Giardia lamblia  
Givotia  
Glochidion  
Glochidionopsis  
Glycydendron  
Gymnanthes  
Gymnosporia  
Haematospermum  
Haemophilus  
Haemophilus influenzae  
Hendecandras  
Hepatitis A virus  
Hepatitis B virus  
Hepatitis C virus  
Herpesviridae  
Hevea  
Hieronima  
Hippocrepantha  
Histoplasma capsulatum  
Homalanthus  
Human T-lymphotropic virus 1  
Human T-lymphotropic virus 2  
Human herpesvirus  
Human herpesvirus 3  
Human herpesvirus 4  
Human immunodeficiency virus  
Human immunodeficiency virus 1  
Human poliovirus  
Hymenocardia  
Immunostimulants  
Influenza A virus  
Influenza B virus

Insecta  
 Janipha  
 Jatropha  
 Julocroton  
 Klebsiella  
 Klebsiella pneumoniae  
 Lasiocroton  
 Legionella  
 Legionella pneumophila  
 Leiocarpus  
 Leishmania  
 Leonardia  
 Lepidanthus  
 Leucocroton  
 Leukocyte  
 Listeria  
 Listeria monocytogenes  
 Mabea  
 Macaranga  
 Macrocroton  
 Mallotus (plant)  
 Manihot  
 Mappa  
 Maprounea  
 Measles virus  
 Melanthesa  
 Mercurialis  
 Mettenia  
 Micrandra  
 Microdesmis  
 Microelus  
 Microsporum  
 Microstachys  
 Monadenium  
 Monadenium guentheri  
 Monadenium lugardae  
 Mononuclear cell (leukocyte)  
 Mozinna  
 Mumps virus  
 (Euphorbiaceae macrocyclic diterpene for inflammation treatment)  
 IT Mycobacterium  
 Mycobacterium leprae  
 Mycobacterium tuberculosis  
 Mycoplasma  
 Mycoplasma pneumoniae  
 Neisseria  
 Neisseria gonorrhoeae  
 Neisseria meningitidis  
 Nematoda  
 Neoscortechinia  
 Neutrophil  
 Omalanthus  
 Omphalea  
 Ophellantha  
 Orbicularia  
 Ostodes  
 Oxydectes  
 Palenga  
 Pantadenia  
 Papovaviridae

Paradrypetes  
Pathogen  
Pausandra  
Pedilanthus  
Pera  
Peridium  
Petalostigma  
Phagocytosis  
Phyllanthus  
Picrodendron  
Pierardia  
Pilinophytum  
Pimeleodendron  
Piranhea  
Platygyne  
Plukenetia  
Pneumocystis carinii  
Podocalyx  
Poinsettia  
Poraresia  
Prokaryote  
Propionibacterium  
Propionibacterium acnes  
Prosartema  
Pseudanthus  
Pycnocomma  
Quadrasia  
Rabies virus  
Reverchonia  
Rhinovirus  
Richeria  
Richeriella  
Ricinella  
Ricinocarpos  
Rickettsia  
Rickettsia rickettsi  
Rottlera  
Rubella virus  
Sagotia  
Salmonella  
Salmonella typhi  
Salmonella typhimurium  
Sandwithia  
Sapium  
Savia  
Sclerocroton  
Sebastiania  
Securinega  
Senefeldera  
Serophyton  
Shigella  
Shigella dysenteriae  
Siphonia  
Spathiostemon  
Spixia  
Staphylococcus  
Staphylococcus aureus  
Stillingia  
Streptococcus  
Streptococcus pneumoniae



Streptococcus pyogenes  
 Strophoblachia  
 Synadenium  
 Synadenium compactum  
 Synadenium grantii  
 Tetracoccus  
 Tetraplandra  
 Tetrorchidium  
 Thyrsanthera  
 Tithymalus  
 Toxoplasma gondii  
 Tragia  
 Treponema  
 Treponema pallidum  
 Trewia  
 Trichomonas vaginalis  
 Trichophyton  
 Trigonostemon  
 Trypanosoma cruzi  
 Trypanosoma gambiense  
 Tyria  
 Ureaplasma  
 Ureaplasma parvum  
 Vaccinia virus  
 Variola virus  
 Vibrio  
 Vibrio cholerae  
 Virus  
 Xylophylla  
 Yersinia  
 Yersinia pestis  
 (Euphorbiaceae macrocyclic diterpene for inflammation treatment)  
 IT Diterpenes  
 Macrocyclic compounds  
 RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU  
 (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)  
 (Euphorbiaceae macrocyclic diterpene for inflammation treatment)  
 IT Eukaryota  
 (PKC-dependent; Euphorbiaceae macrocyclic diterpene for inflammation  
 treatment)  
 IT Respiration, animal  
 (burst; Euphorbiaceae macrocyclic diterpene for inflammation treatment)  
 IT Ovary, neoplasm  
 (carcinoma, inhibitors; Euphorbiaceae macrocyclic diterpene for  
 inflammation treatment)  
 IT Diterpenes  
 RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU  
 (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)  
 (esters; Euphorbiaceae macrocyclic diterpene for inflammation  
 treatment)  
 IT Gene  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (expression, PKC-dependent; Euphorbiaceae macrocyclic diterpene for  
 inflammation treatment)  
 IT Biological transport  
 (intracellular, PKC; Euphorbiaceae macrocyclic diterpene for  
 inflammation treatment)  
 IT Eukaryota  
 (lower; Euphorbiaceae macrocyclic diterpene for inflammation treatment)  
 IT Antitumor agents

- (melanoma; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT Lymphocyte  
(natural killer cell; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT Antitumor agents  
(ovary carcinoma; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT Drug delivery systems  
(tinctures, tincture; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT Cell differentiation  
(to bipolar dendritic phenotype; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT Drug delivery systems  
(topical; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT 16561-29-8, Pma 37558-16-0, Phorbol dibutyrate  
141436-78-4, Protein kinase C  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT 67707-88-4, Ingenane 67707-88-4D,  
Ingenane, derivs. 75567-37-2 82425-35-2  
210108-85-3, Jatrophone 1 210108-85-3D, Jatrophone 1,  
derivs. 210108-86-4, Jatrophone 2 210108-86-4D,  
Jatrophone 2, derivs. 210108-87-5, Jatrophone 3  
210108-87-5D, Jatrophone 3, derivs. 210108-88-6,  
Jatrophone 4 210108-88-6D, Jatrophone 4, derivs.  
210108-89-7, Jatrophone 5 210108-89-7D, Jatrophone 5,  
derivs. 210108-90-0, Jatrophone 6 210108-90-0D,  
Jatrophone 6, derivs.  
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU  
(Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)  
(Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT 107-95-9, .beta.-Alanine 515-25-3 590-46-5,  
Betaine hydrochloride  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(carrier; Euphorbiaceae macrocyclic diterpene for inflammation treatment)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:903881 HCAPLUS

DOCUMENT NUMBER: 136:42795

TITLE: Macrocyclic diterpenes for treatment and prophylaxis of PKC-related conditions

INVENTOR(S): Aylward, James Harrison; Parsons, Peter Gordon; Suhrbier, Andreas; Turner, Kathleen Anne

PATENT ASSIGNEE(S): Peplin Research Pty. Ltd., Australia

SOURCE: PCT Int. Appl., 215 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001093884	A1	20011213	WO 2001-AU679	20010607
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 752462	B2	20020919	AU 2001-63661	20010607
PRIORITY APPLN. INFO.:			AU 2000-8017	A 20000607
			WO 2001-AU679	W 20010607

OTHER SOURCE(S): MARPAT 136:42795

AB The present invention relates generally to chem. agents useful in the treatment and prophylaxis of protein kinase C (PKC)-related conditions in mammals, including humans and primates, non-mammalian animals and avian species. More particularly, the present invention provides a chem. agent of the macrocyclic diterpene family obtainable from a member of the Euphorbiaceae family of plants or botanical or horticultural relatives thereof or derivs. or chem. analogs or chem. synthetic forms of the agents for use in the treatment or prophylaxis of PKC-related conditions in mammalian, animal and avian subjects. The subject chem. agents are also useful for modulating expression of genetic sequences including promotion and other regulatory sequences. The present invention further contemplates a method for the prophylaxis and/or treatment in mammalian, animal or avian subjects with PKC-related conditions by the topical or systemic administration of a macrocyclic diterpene obtainable from a member of the Euphorbiaceae family of plants or their botanical or horticultural derivs. or a deriv., chem. analog or chem. synthetic form of the agent. The chem. agent of the present invention may be in the form of a purified compd., mixt. of compds., a precursor form of one or more of the compds. capable of chem. transformation into a therapeutically and/or genetically active agent or in the form of a chem. fraction, sub-fraction, prepn. or ext. of the plant. For example, an exts. of Euphorbia peplus sap (PEP003) reduced replication kinetics of HIV-1 virus in infected T-cells in a dose dependent manner. PEP003 at concns. of 500, 50, and 5 nM reduced the replication rate by approx. 99.9%, 95% and 47%, resp., relative to untreated, infected cells. Also, diterpene esters obtained from E. peplus activated human peripheral blood leukocytes to produce, in

a PKC-dependent manner, phagocytosis and respiratory burst which are potentially lethal to microorganisms and other cells, e.g., tumor cells.

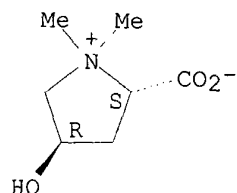
IT 515-25-3 6340-41-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(carrier; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)

RN 515-25-3 HCAPLUS

CN Pyrrolidinium, 2-carboxy-4-hydroxy-1,1-dimethyl-, inner salt, (2S,4R)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 6340-41-6 HCAPLUS

CN Ethanaminium, 2-carboxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

$\text{Me}_3^+\text{N}-\text{CH}_2-\text{CH}_2-\text{CO}_2\text{H}$

●  $\text{Cl}^-$

IT 141436-78-4, Protein kinase C

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)

RN 141436-78-4 HCAPLUS

CN Kinase (phosphorylating), protein, C (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 67-56-1, Methanol, uses 141-78-6, Ethyl acetate, uses  
9041-37-6, Sephadex LH 20 9060-05-3, Amberlite XAD-2  
11104-40-8, Amberlite XAD-8 37380-42-0, Amberlite XAD-4  
37380-43-1, Amberlite XAD-7 104219-63-8, Amberlite  
XAD-16

RL: NUU (Other use, unclassified); USES (Uses)  
(isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)

RN 67-56-1 HCAPLUS

CN Methanol (8CI, 9CI) (CA INDEX NAME)

$\text{H}_3\text{C}-\text{OH}$

RN 141-78-6 HCAPLUS

CN Acetic acid ethyl ester (8CI, 9CI) (CA INDEX NAME)

Et-O-Ac

RN 9041-37-6 HCAPLUS

CN Sephadex LH 20 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 9060-05-3 HCAPLUS

CN Amberlite XAD 2 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 11104-40-8 HCAPLUS

CN Amberlite XAD 8 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 37380-42-0 HCAPLUS

CN Amberlite XAD 4 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 37380-43-1 HCAPLUS

CN Amberlite XAD 7 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 104219-63-8 HCAPLUS

CN Amberlite XAD 16 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 67707-88-4P, Ingenane 82425-35-2P

210108-85-3P, Jatrophane 1 210108-86-4P, Jatrophane 2

210108-87-5P, Jatrophane 3 210108-88-6P, Jatrophane 4

210108-89-7P, Jatrophane 5 210108-90-0P, Jatrophane 6

210108-91-1P, Pepluane 214900-78-4DP, derivs.

RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU

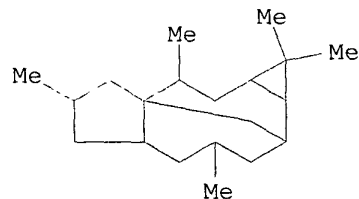
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)

RN 67707-88-4 HCAPLUS

CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX NAME)

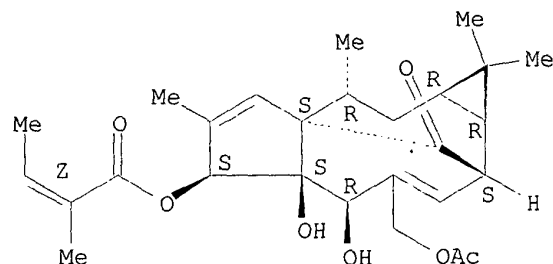


RN 82425-35-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-

tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

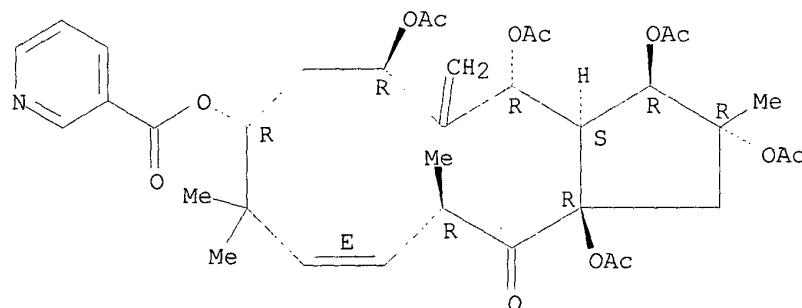
Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

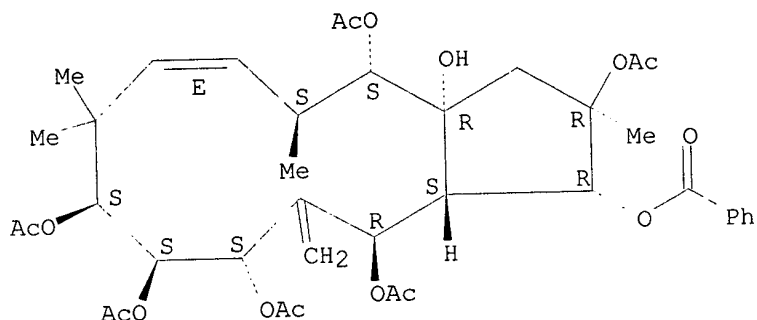
Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS

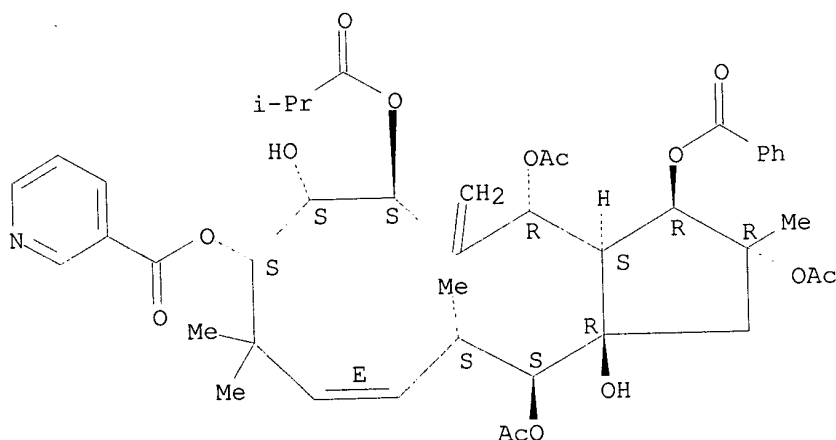
CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol, 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



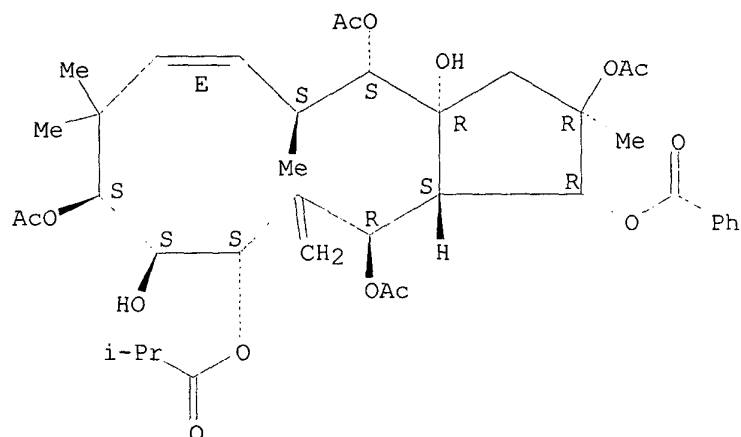
RN 210108-87-5 HCAPLUS  
 CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
 Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS  
 CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

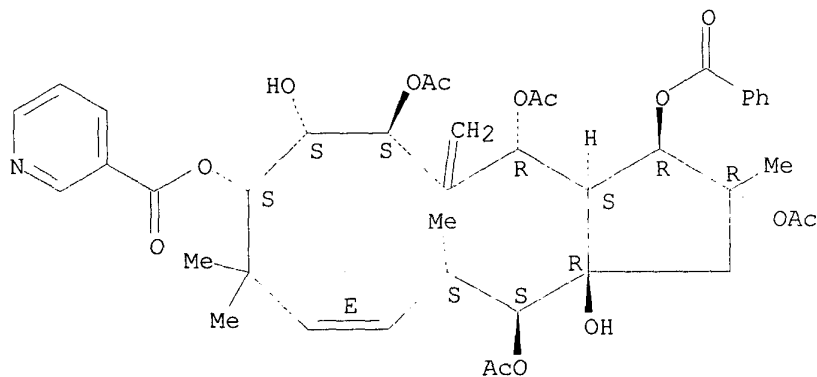
Absolute stereochemistry. Rotation (+).  
 Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-  
2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-  
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-  
cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.

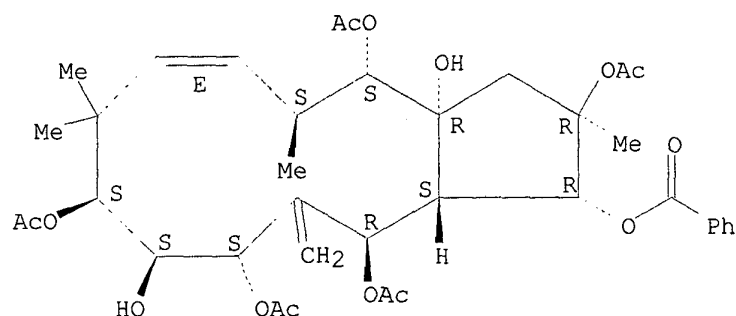


RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
,2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,  
13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as described by E or Z.

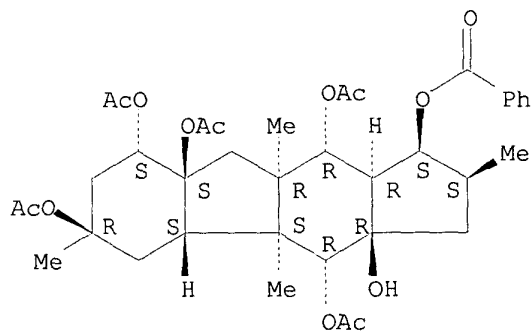




RN 210108-91-1 HCAPLUS

CN Cyclopenta[b]fluorene-1,3a,4,6,8,8a,10(1H,4H)-heptol, dodecahydro-2,4a,6,9a-tetramethyl-, 4,6,8,8a,10-pentaacetate 1-benzoate, (1S,2S,3aR,4R,4aS,4bS,6R,8R,8aR,9aR,10R,10aR)- (9CI) (CA INDEX NAME)

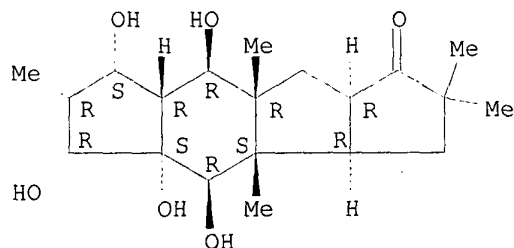
Absolute stereochemistry.



RN 214900-78-4 HCAPLUS

CN 1H-Cyclopenta[a]-s-indacen-1-one, tetradeca-hydro-4,4a,5,7,8-pentahydroxy-2,2,3b,6,8a-pentamethyl-, (3aR,3bS,4R,4aS,5R,6R,7S,7aR,8R,8aR,9aR)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.



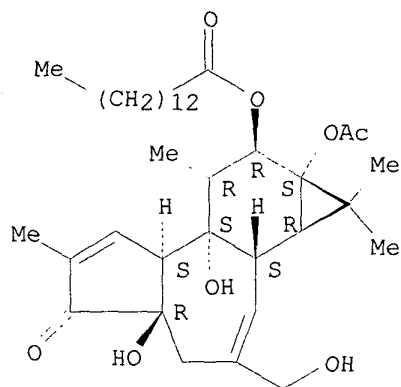
IT 16561-29-8, TPA (phorbol derivative)

RL: BSU (Biological study, unclassified); BIOL (Biological study) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants with less tumor promoting capacity than TPA for treatment and prophylaxis of protein kinase C-related conditions)

RN 16561-29-8 HCAPLUS

CN Tetradecanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-9a-(acetyloxy)-  
1a,1b,4,4a,5,7a,7b,8,9,9a-decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-  
1,1,6,8-tetramethyl-5-oxo-1H-cyclopropa[3,4]benz[1,2-e]azulen-9-yl ester  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K035-78  
ICS A61K031-455; A61K031-22; A61P031-02; G06F019-00  
CC 63-4 (Pharmaceuticals)  
Section cross-reference(s): 1, 11, 62  
ST macrocyclic diterpene Euphorbiaceae antiinflammatory immunostimulant;  
protein kinase C macrocyclic diterpene antiinflammatory immunostimulant  
IT Antitumor agents  
(Burkitt's lymphoma; isolation of macrocyclic diterpenes from  
Euphorbiaceae and related plants for treatment and prophylaxis of  
protein kinase C-related conditions)  
IT Leukocyte  
(activation; isolation of macrocyclic diterpenes from Euphorbiaceae and  
related plants for treatment and prophylaxis of protein kinase  
C-related conditions)  
IT Skin, neoplasm  
(basal cell carcinoma, inhibitors; isolation of macrocyclic diterpenes  
from Euphorbiaceae and related plants for treatment and prophylaxis of  
protein kinase C-related conditions)  
IT Antitumor agents  
(basal cell carcinoma; isolation of macrocyclic diterpenes from  
Euphorbiaceae and related plants for treatment and prophylaxis of  
protein kinase C-related conditions)  
IT Diptera  
(blood-sucking, sand, bites, treatment of; isolation of macrocyclic  
diterpenes from Euphorbiaceae and related plants for treatment and  
prophylaxis of protein kinase C-related conditions)  
IT Respiration, animal  
(burst, induction of, in peripheral mononuclear cells; isolation of  
macrocyclic diterpenes from Euphorbiaceae and related plants for  
treatment and prophylaxis of protein kinase C-related conditions)  
IT Ovary, neoplasm  
(carcinoma, inhibitors; isolation of macrocyclic diterpenes from  
Euphorbiaceae and related plants for treatment and prophylaxis of  
protein kinase C-related conditions)  
IT Polymers, uses  
RL: NUU (Other use, unclassified); USES (Uses)

- (co-, arom.; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Drug screening  
(computer program for; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Diterpenes  
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(esters; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Gene  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(expression, protein kinase C-dependent; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Computer program  
(for drug screening; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Drug delivery systems  
(gels; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Cell differentiation  
(inducers; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Neutrophil  
(induction of invasion of, in skin; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Mononuclear cell (leukocyte)  
(induction of respiratory burst in; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Peritoneum  
(infection, streptococcal; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Skin, disease  
(infection; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Skin, neoplasm  
(inhibitors; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Skin, disease  
(insect bite, treatment of; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Acalypha  
Acidoton  
Actinostemon  
Adelia  
Adenocline

Adenocrepis  
Adenophaedra  
Adenoviridae  
Adisca  
Agrostistachys  
Alchornea  
Alchorneopsis  
Alcinaeanthus  
Alcoceria  
Aleurites  
Alphavirus  
Amanoa  
Ameba  
Andrachne  
Angostyles  
Animal virus  
Anisophyllum  
Anthelmintics  
Anti-inflammatory agents  
Antibacterial agents  
Antidesma  
Antimicrobial agents  
Antitumor agents  
Antiviral agents  
Aphora  
Apoptosis  
Aporosa  
Aporosella  
Arachnida  
Arbovirus  
Argythamnia  
Aspergillus  
Astrococcus  
Astrogyne  
Aves  
Baccaurea  
Bacillus (bacterium genus)  
Bacillus anthracis  
Balantidium coli  
Baliospermum  
Bernardia  
Beyeriopsis  
Bischofia  
Blachia  
Blastomyces dermatitidis  
Blumeodondron  
Bonania  
Bordetella  
Bordetella pertussis  
Borrelia  
Borrelia burgdorferi  
Bradleia  
Breynia  
Breyniopsis  
Briedelia  
Buraeavia  
Caletia  
Candida albicans  
Caperonia  
Caryodendron

Celianella  
Cephalocroton  
Chaenotheca  
Chaetocarpus  
Cheilosa  
Chiropetalum  
Chlamydia  
Chlamydia trachomatis  
Choriophyllum  
Cicca  
Claoxylon  
Cleidion  
Cleistanthus  
Clostridium  
Clostridium botulinum  
Clostridium perfringens  
Clostridium tetani  
Clutia  
Cnesmone  
Cnidoscolus  
Coccoceras  
Codiaeum  
Coelodiscus  
Conami  
Conceveiba  
Conceveibastrum  
Conceveibum  
Corynebacterium  
Corynebacterium diphtheriae  
Corythea  
Cosmetics  
Croizatia  
Croton  
Crotonopsis  
Crozophora  
Cryptococcus neoformans  
Cryptosporidium  
Cubanthus  
Cunuria  
Cytomegalovirus  
Dactylostemon  
Dalechampia  
Dendrocousinsia  
Diasperus  
Didymocistus  
Dimorphocalyx  
Discocarpus  
Ditaxis  
Dodecastigma  
Drug delivery systems  
Drypetes  
Dysopsis  
Elateriospermum  
Endadenium  
Endospermum  
Entamoeba histolytica  
Epidermophyton  
Erismanthus  
Erythrocarpus  
Erythrochilus

Escherichia  
Escherichia coli  
Eukaryota  
Eumecanthus  
Euphorbia  
Euphorbia aaron-rossii  
Euphorbia abbreviata  
Euphorbia acuta  
Euphorbia alatocaulis  
Euphorbia albicaulis  
Euphorbia albomarginata  
Euphorbia aliceae  
Euphorbia alta  
Euphorbia anacampseros  
Euphorbia andromedae  
Euphorbia angusta  
Euphorbia anthonyi  
Euphorbia antiguensis  
Euphorbia apocynifolia  
Euphorbia arabica  
Euphorbia ariensis  
Euphorbia arizonica  
Euphorbia arkansana  
Euphorbia arteagae  
Euphorbia arundelana  
Euphorbia astroites  
Euphorbia atrococca  
Euphorbia baselices  
Euphorbia batabanensis  
Euphorbia bergeri  
Euphorbia bermudiana  
Euphorbia bicolor  
Euphorbia biformis  
Euphorbia bifurcata  
Euphorbia bilobata  
Euphorbia biramensis  
Euphorbia biuncialis  
Euphorbia blepharostipula  
Euphorbia blodgetti  
Euphorbia boerhaavioides  
Euphorbia boliviana  
Euphorbia bracei  
Euphorbia brachiata  
Euphorbia brachycera  
Euphorbia brandegeei  
Euphorbia brittonii  
Euphorbia caesia  
Euphorbia calcicola  
Euphorbia campestris  
Euphorbia candelabrum  
Euphorbia capitellata  
Euphorbia carmenensis  
Euphorbia carunculata  
Euphorbia cayensis  
Euphorbia celastroides  
Euphorbia chalicophila  
Euphorbia chamaer rhodos  
Euphorbia chamaesula  
Euphorbia chiapensis  
Euphorbia chiogenoides

Euphorbia cinerascens  
Euphorbia clarionensis  
Euphorbia colimae  
Euphorbia colorata  
Euphorbia commutata  
Euphorbia consoquitlae  
Euphorbia convolvuloides  
Euphorbia corallifera  
Euphorbia creberrima  
Euphorbia crenulata  
Euphorbia cubensis  
Euphorbia cuspidata  
Euphorbia cymbiformis  
Euphorbia darlingtonii  
Euphorbia defoliata  
Euphorbia degeneri  
Euphorbia deltoidea  
Euphorbia dentata  
Euphorbia depressa  
Euphorbia dictyosperma  
Euphorbia dioeca  
Euphorbia discoidalis  
Euphorbia dorsiventralis  
Euphorbia drummondii  
Euphorbia duclouxii  
Euphorbia dussii  
Euphorbia eanophylla  
Euphorbia eggersii  
Euphorbia eglandulosa  
Euphorbia elata  
Euphorbia enalla  
Euphorbia eriogonoides  
Euphorbia eriophylla  
Euphorbia esculaeformis  
Euphorbia espirituensis  
Euphorbia esula  
Euphorbia excisa  
Euphorbia exclusiva  
Euphorbia exstipitata  
Euphorbia exstipulata  
Euphorbia fendleri  
Euphorbia filicaulis  
Euphorbia filiformis  
Euphorbia florida  
Euphorbia fruticulosa  
Euphorbia garberi  
Euphorbia gaumerii  
Euphorbia gerardiana  
Euphorbia geyeri  
Euphorbia glyptosperma  
Euphorbia gorgonis  
Euphorbia gracilior  
Euphorbia gracillima  
Euphorbia gradyi  
Euphorbia graminea  
Euphorbia grisea  
Euphorbia guadalajarana  
Euphorbia guanarensis  
Euphorbia gymnadenia  
(isolation of macrocyclic diterpenes from Euphorbiaceae and related

plants for treatment and prophylaxis of protein kinase C-related conditions)

IT Euphorbia haematantha  
Euphorbia hedyotoides  
Euphorbia heldrichii  
Euphorbia helenae  
Euphorbia helleri  
Euphorbia helwigii  
Euphorbia henricksonii  
Euphorbia heterophylla  
Euphorbia hexagona  
Euphorbia hexagonoides  
Euphorbia hinkleyorum  
Euphorbia hintonii  
Euphorbia hirta  
Euphorbia hirtula  
Euphorbia hooveri  
Euphorbia humistrata  
Euphorbia hypericifolia  
Euphorbia inundata  
Euphorbia involuta  
Euphorbia jaliscensis  
Euphorbia jejuna  
Euphorbia johnstonii  
Euphorbia juttae  
Euphorbia knuthii  
Euphorbia lasiocarpa  
Euphorbia lata  
Euphorbia latazi  
Euphorbia latericolor  
Euphorbia laxiflora  
Euphorbia lecheoides  
Euphorbia ledienii  
Euphorbia leucophylla  
Euphorbia lineata  
Euphorbia linguiformis  
Euphorbia longecornuta  
Euphorbia longepetiolata  
Euphorbia longeramosa  
Euphorbia longinsulicola  
Euphorbia longipila  
Euphorbia lupulina  
Euphorbia lurida  
Euphorbia lycioides  
Euphorbia macropodoides  
Euphorbia macvaughiana  
Euphorbia manca  
Euphorbia mandoniana  
Euphorbia mangleti  
Euphorbia mango  
Euphorbia marylandica  
Euphorbia mayana  
Euphorbia melanadenia  
Euphorbia melanocarpa  
Euphorbia meridensis  
Euphorbia mertonii  
Euphorbia mexiae  
Euphorbia microcephala  
Euphorbia microclada  
Euphorbia micromera



Euphorbia misella  
Euphorbia missurica  
Euphorbia montana  
Euphorbia montereyana  
Euphorbia multicaulis  
Euphorbia multiformis  
Euphorbia multinodis  
Euphorbia multiseta  
Euphorbia muscicola  
Euphorbia neomexicana  
Euphorbia nephradenia  
Euphorbia niqueroana  
Euphorbia oaxacana  
Euphorbia occidentalis  
Euphorbia odontodenia  
Euphorbia olivacea  
Euphorbia olowaluana  
Euphorbia ophthalmica  
Euphorbia ovata  
Euphorbia pachypoda  
Euphorbia pachyrhiza  
Euphorbia padifolia  
Euphorbia palmeri  
Euphorbia paludicola  
Euphorbia parishii  
Euphorbia parryi  
Euphorbia parviflora  
Euphorbia paxiana  
Euphorbia pediculifera  
Euphorbia peplidion  
Euphorbia peploides  
Euphorbia peplus  
Euphorbia pergamena  
Euphorbia perlignea  
Euphorbia petaloidea  
Euphorbia petrina  
Euphorbia picachensis  
Euphorbia pilosula  
Euphorbia pinariona  
Euphorbia pinctorum  
Euphorbia pionsperma  
Euphorbia platysperma  
Euphorbia plicata  
Euphorbia poeppigii  
Euphorbia poliosperma  
Euphorbia polycarpa  
Euphorbia polycnemoides  
Euphorbia polyphylla  
Euphorbia portoricensis  
Euphorbia portulacoides  
Euphorbia portulana  
Euphorbia preslii  
Euphorbia prostrata  
Euphorbia pteroneura  
Euphorbia pycnanthema  
Euphorbia ramosa  
Euphorbia ramosa  
Euphorbia rapulum  
Euphorbia remyi  
Euphorbia retroscabra

Euphorbia revoluta  
Euphorbia rivularis  
Euphorbia robusta  
Euphorbia rubida  
Euphorbia rubrosperma  
Euphorbia rupicola  
Euphorbia sanmartensis  
Euphorbia saxatilis  
Euphorbia schizoloba  
Euphorbia sclerocyathium  
Euphorbia scopulorum  
Euphorbia senilis  
Euphorbia serpyllifolia  
Euphorbia serrula  
Euphorbia setiloba  
Euphorbia sonorae  
Euphorbia soobyi  
Euphorbia sparsiflora  
Euphorbia sphaerosperma  
Euphorbia spruceana  
Euphorbia stellata  
Euphorbia subcoerulea  
Euphorbia submammilaris  
Euphorbia subpeltata  
Euphorbia subpubens  
Euphorbia subreniforme  
Euphorbia subtrifoliata  
Euphorbia succedanea  
Euphorbia syphilitica  
Euphorbia tamaulipasana  
Euphorbia telephioides  
Euphorbia tenuissima  
Euphorbia tetrapora  
Euphorbia tirucalli  
Euphorbia tomentella  
Euphorbia tomentosa  
Euphorbia torralbasii  
Euphorbia towarensis  
Euphorbia trachysperma  
Euphorbia tricolor  
Euphorbia troyana  
Euphorbia tuerckheimii  
Euphorbia turczaninowii  
Euphorbia umbellulata  
Euphorbia undulata  
Euphorbia vermiformis  
Euphorbia versicolor  
Euphorbia villifera  
Euphorbia violacea  
Euphorbia whitei  
Euphorbia xanti  
Euphorbia xylopoda  
Euphorbia yayalesia  
Euphorbia yungasensis  
Euphorbia zeravschanica  
Euphorbia zinniiflora  
Euphorbiaceae  
Euphorbiodendron  
Excoecaria  
Fluggea

Fungi  
Fungicides  
Garcia  
Gavarretia  
Gelonium  
Gene therapy  
Giardia lamblia  
Givotia  
Glochidion  
Glochidionopsis  
Glycydendron  
Gymnanthes  
Gymnosporia  
Haematospermum  
Haemophilus  
Haemophilus influenzae  
Hendecandras  
Hepatitis A virus  
Hepatitis B virus  
Hepatitis C virus  
Hevea  
Hieronima  
Hippocrepandra  
Histoplasma capsulatum  
Homalanthus  
Human  
Human T-lymphotropic virus 1  
Human T-lymphotropic virus 2  
Human adenovirus 5  
Human herpesvirus  
Human herpesvirus 3  
Human herpesvirus 4  
Human immunodeficiency virus 1  
Human poliovirus  
Hymenocardia  
Immunostimulants  
Influenza A virus  
Influenza B virus  
Insecta  
Janipha  
Jatropha  
Julocroton  
Klebsiella  
Klebsiella pneumoniae  
Lasiocroton  
Legionella  
Legionella pneumophila  
Leiocarpus  
Leishmania  
Leonardia  
Lepidanthus  
Leucocroton  
Listeria  
Listeria monocytogenes  
Mabea  
Macaranga  
Macrocroton  
Mallotus (plant)  
Mammalia  
Manihot

Mappa  
Maprounea  
Measles virus  
Melanthesa  
Mercurialis  
Mettenia  
    (isolation of macrocyclic diterpenes from Euphorbiaceae and related  
    plants for treatment and prophylaxis of protein kinase C-related  
    conditions)

IT Micrandra  
Microdesmis  
Microelus  
Microsporum  
Microstachys  
Monadenium  
Mozinna  
Mumps virus  
Mycobacterium  
Mycobacterium leprae  
Mycobacterium tuberculosis  
Mycoplasma  
Mycoplasma pneumoniae  
Neisseria  
Neisseria gonorrhoeae  
Neisseria meningitidis  
Nematoda  
Neoscortechinia  
Omalanthus  
Omphalea  
Ophellantha  
Orbicularia  
Ostodes  
Oxydectes  
Palenga  
Pantadenia  
Papovaviridae  
Paradrypetes  
Parasiticides  
Pausandra  
Pedilanthus  
Pera  
Peridium  
Petalostigma  
Phyllanthus  
Picrodendron  
Pierardia  
Pilinophytum  
Pimeleodendron  
Piranhea  
Platygyne  
Plukenetia  
Pneumocystis carinii  
Podocalyx  
Poinsettia  
Poraresia  
Poxviridae  
Primates  
Prokaryote  
Propionibacterium  
Propionibacterium acnes

Prosartema  
Pseudanthus  
Pycnocomma  
Quadrasia  
Rabies virus  
Reverchonia  
Rhinovirus  
Richeria  
Richeriella  
Ricinella  
Ricinocarpos  
Rickettsia  
Rickettsia rickettsi  
Rottlera  
Rubella virus  
Sagotia  
Salmonella  
Salmonella typhi  
Salmonella typhimurium  
Sandwithia  
Sapium  
Savia  
Sclerocroton  
Sebastiania  
Securinega  
Senefeldera  
Senefelderopsis  
Serophyton  
Shigella  
Shigella dysenteriae  
Siphonia  
Skin preparations (pharmaceutical)  
Spathiostemon  
Spixia  
Staphylococcus  
Staphylococcus aureus  
Stillingia  
Streptococcus  
Streptococcus pneumoniae  
Streptococcus pyogenes  
Strophoblachia  
Synadenium  
Tetracoccus  
Tetraplandra  
Tetrorchidium  
Thyrsanthera  
Tithymalus  
Toxoplasma gondii  
Tragia  
Treponema  
Treponema pallidum  
Trewia  
Trichomonas vaginalis  
Trichophyton  
Trichophyton mentagrophytes mentagrophytes  
Trigonostemon  
Trypanosoma cruzi  
Trypanosoma gambiense  
Tyria  
Ureaplasma

- Ureaplasma parvum
- Vaccinia virus
- Variola virus
- Venoms
- Vibrio
- Vibrio cholerae
- Worm
- Xylophylla
- Yeast
- Yersinia
- Yersinia pestis
  - (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Toxins
  - RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Alcohols, uses
  - RL: NUU (Other use, unclassified); USES (Uses) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Amides, uses
  - RL: NUU (Other use, unclassified); USES (Uses) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Ethers, uses
  - RL: NUU (Other use, unclassified); USES (Uses) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Ketones, uses
  - RL: NUU (Other use, unclassified); USES (Uses) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Cell activation
  - (leukocyte; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Diterpenes
  - RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (macrocyclic; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Antitumor agents
  - (melanoma; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Lymphocyte
  - (natural killer cell, stimulation of; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Skin
  - (neutrophil invasion in, induction of; isolation of macrocyclic

- diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Adsorbents  
(nonionic porous; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Animal  
(nonmammalian; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Drug delivery systems  
(ointments, creams; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Solvents  
(org.; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Antitumor agents  
(ovary carcinoma; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Virus vectors  
(promoters; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Tinea (skin disease)  
(ringworm; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Culicidae  
(skin bites, treatment of; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Antitumor agents  
(skin; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Phagocytosis  
(stimulation of; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Organic compounds, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(sulfur-contg.; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Drug delivery systems  
(tinctures; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Drug delivery systems  
(topical; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT 515-25-3 6340-41-6  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(carrier; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)

- IT 141436-78-4, Protein kinase C  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (isolation of macrocyclic diterpenes from Euphorbiaceae and related  
 plants for treatment and prophylaxis of protein kinase C-related  
 conditions)
- IT 67-56-1, Methanol, uses 141-78-6, Ethyl acetate, uses  
 9041-37-6, Sephadex LH 20 9060-05-3, Amberlite XAD-2  
 11104-40-8, Amberlite XAD-8 37380-42-0, Amberlite XAD-4  
 37380-43-1, Amberlite XAD-7 104219-63-8, Amberlite  
 XAD-16  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (isolation of macrocyclic diterpenes from Euphorbiaceae and related  
 plants for treatment and prophylaxis of protein kinase C-related  
 conditions)
- IT 67707-88-4P, Ingenane 82425-35-2P  
 210108-85-3P, Jatrophane 1 210108-86-4P, Jatrophane 2  
 210108-87-5P, Jatrophane 3 210108-88-6P, Jatrophane 4  
 210108-89-7P, Jatrophane 5 210108-90-0P, Jatrophane 6  
 210108-91-1P, Pepluane 214900-78-4DP, derivs.  
 RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (isolation of macrocyclic diterpenes from Euphorbiaceae and related  
 plants for treatment and prophylaxis of protein kinase C-related  
 conditions)
- IT 16561-29-8, TPA (phorbol derivative)  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (isolation of macrocyclic diterpenes from Euphorbiaceae and related  
 plants with less tumor promoting capacity than TPA for treatment and  
 prophylaxis of protein kinase C-related conditions)
- REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



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L4 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:903879 HCAPLUS

DOCUMENT NUMBER: 136:31656

TITLE: Euphorbiaceae macrocyclic diterpenes for the treatment of infection and PKC-related conditions

INVENTOR(S): Aylward, James Harrison; Parsons, Peter Gordon; Suhrbier, Andreas; Turner, Kathleen Anne

PATENT ASSIGNEE(S): Peplin Research Pty. Ltd., Australia

SOURCE: PCT Int. Appl., 179 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001093883	A1	20011213	WO 2001-AU678	20010607
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 748542	B2	20020606	AU 2001-73732	20010607
PRIORITY APPLN. INFO.:			AU 2000-8017	A 20000607
			WO 2001-AU678	W 20010607

OTHER SOURCE(S): MARPAT 136:31656

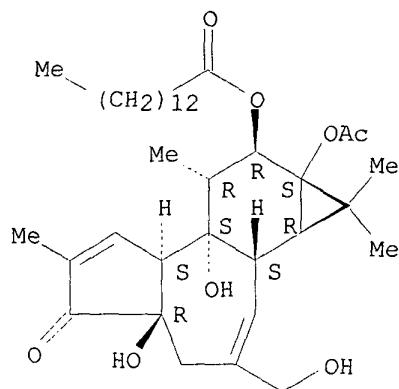
AB The invention relates generally to chem. agents useful in the treatment and prophylaxis of infection by pathogenic or potentially pathogenic entities, or entities capable of opportunistic infection in mammals, including humans and primates, non-mammalian animals and avian species. More particularly, the invention provides a chem. agent of the macrocyclic diterpene family obtainable from a member of the Euphorbiaceae family of plants or botanical or horticultural relatives thereof or derivs. or chem. analogs or chem. synthetic forms of the agents for use in the treatment or prophylaxis of infection by pathogenic entities in mammalian, animal and avian subjects. The invention further provides a method for the prophylaxis and/or treatment in mammalian, animal or avian subjects of infection or potential infection by pathogenic entities by the topical or systemic administration of a macrocyclic diterpene obtainable from a member of the Euphorbiaceae family of plants or their botanical or horticultural derivs. or a deriv., chem. analog or chem. synthetic form of the agent. The chem. agent of the invention may be in the form of a purified compd., mixt. of compds., a precursor form of one or more of the compds. capable of chem. transformation into a therapeutically active agent or in the form of a chem. fraction, subfraction, prepn. or ext. of the plant.

IT 16561-29-8, Pma 37558-16-0, Phorbol dibutyrate  
141436-78-4, Protein kinase C  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)

RN 16561-29-8 HCAPLUS

CN Tetradecanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-9a-(acetyloxy)-1a,1b,4,4a,5,7a,7b,8,9,9a-decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-1,1,6,8-tetramethyl-5-oxo-1H-cyclopropa[3,4]benz[1,2-e]azulen-9-yl ester (9CI) (CA INDEX NAME)

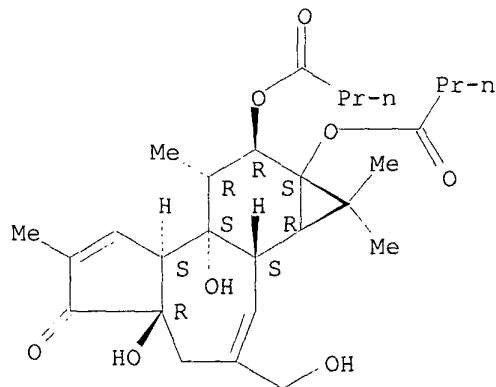
Absolute stereochemistry.



RN 37558-16-0 HCAPLUS

CN Butanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-1,1a,1b,4,4a,5,7a,7b,8,9-decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-1,1,6,8-tetramethyl-5-oxo-9aH-cyclopropa[3,4]benz[1,2-e]azulene-9,9a-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 141436-78-4 HCAPLUS

CN Kinase (phosphorylating), protein, C (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 67707-88-4, Ingenane 67707-88-4D,  
Ingenane, derivs. 75567-37-2 82425-35-2  
210108-85-3, Jatrophane 1 210108-85-3D, Jatrophane 1,  
derivs. 210108-86-4, Jatrophane 2 210108-86-4D,  
Jatrophane 2, derivs. 210108-87-5, Jatrophane 3  
210108-87-5D, Jatrophane 3, derivs. 210108-88-6,  
Jatrophane 4 210108-88-6D, Jatrophane 4, derivs.  
210108-89-7, Jatrophane 5 210108-89-7D, Jatrophane 5,

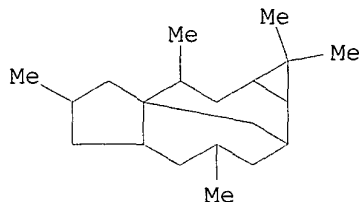
derivs. 210108-90-0, Jatrophane 6 210108-90-0D,

Jatrophane 6, derivs.

RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses) (Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)

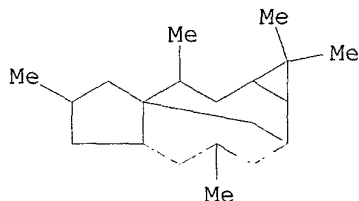
RN 67707-88-4 HCAPLUS

CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX NAME)



RN 67707-88-4 HCAPLUS

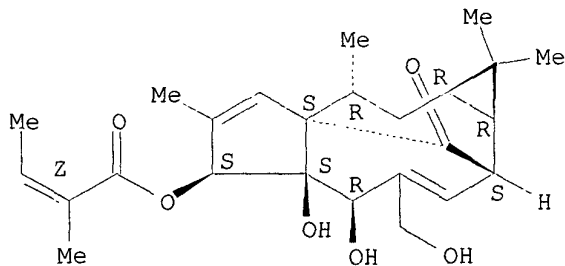
CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX NAME)



RN 75567-37-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-4-(hydroxymethyl)-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

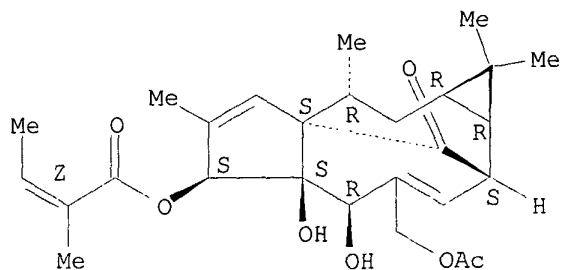
Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



RN 82425-35-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-  
[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-  
tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-  
yl ester, (2Z)- (9CI) (CA INDEX NAME)

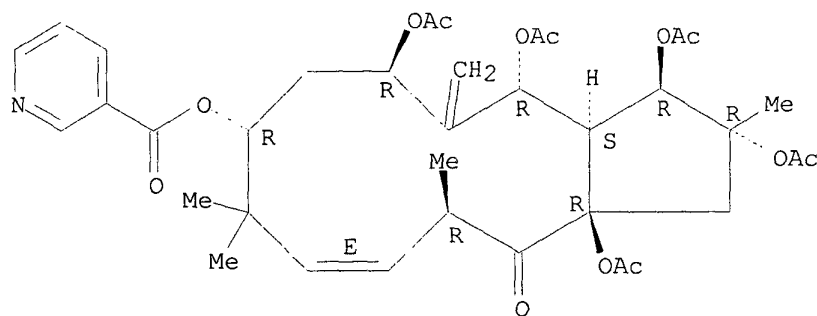
Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-  
pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-  
tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI)  
(CA INDEX NAME)

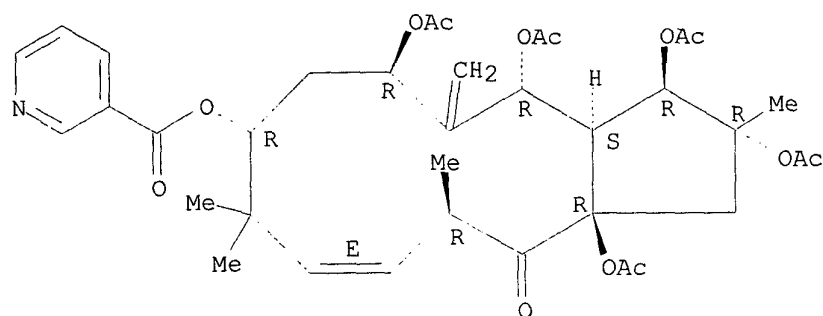
Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-  
pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-  
tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI)  
(CA INDEX NAME)

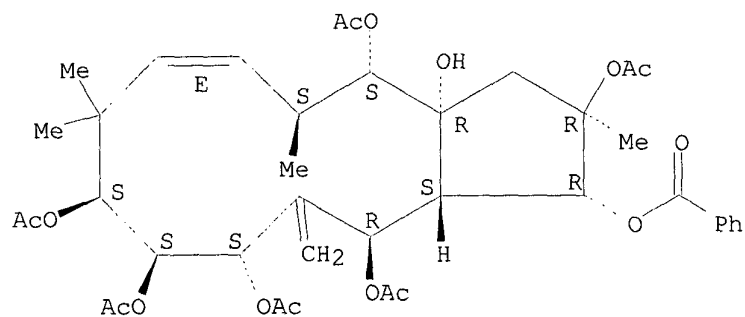
Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
, 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13  
R,13aS)- (9CI) (CA INDEX NAME)

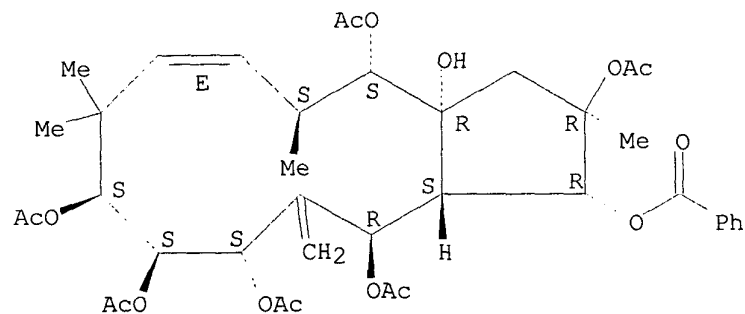
Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
, 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13  
R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.

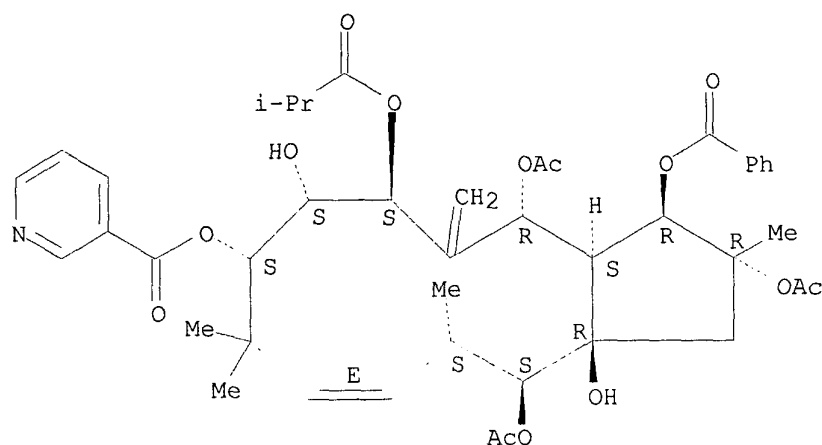


RN 210108-87-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as described by E or Z.

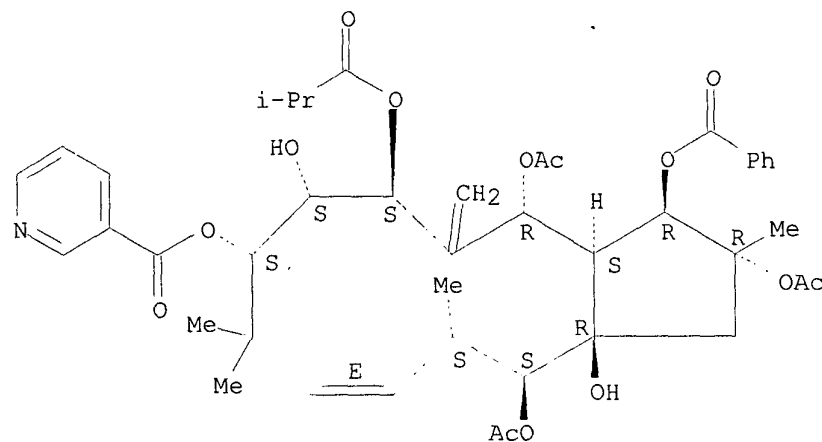


RN 210108-87-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

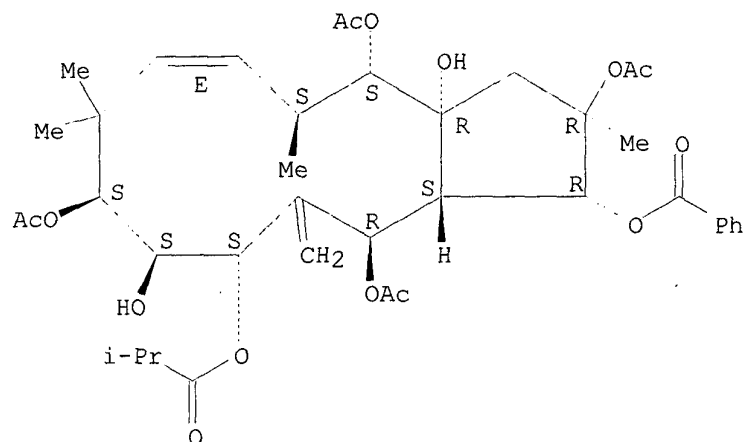
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

CN	Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)
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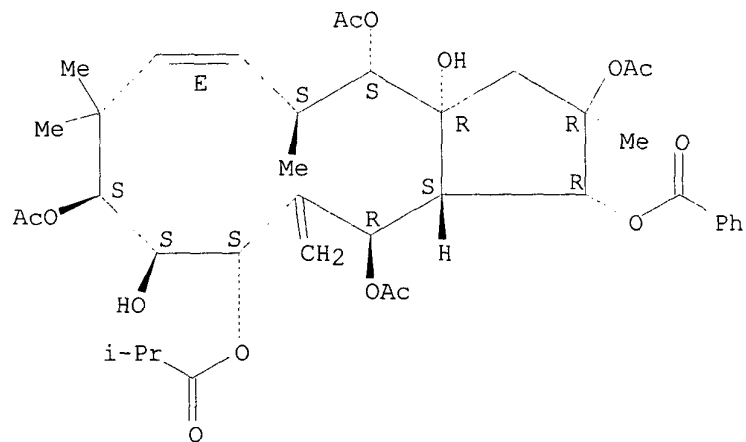
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-  
2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-  
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-  
cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

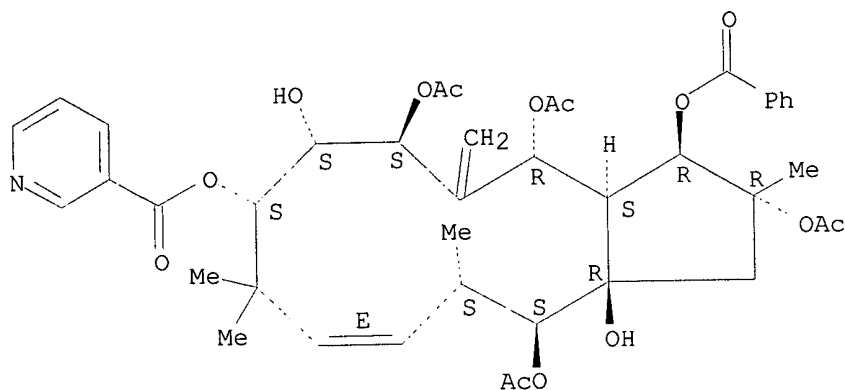
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

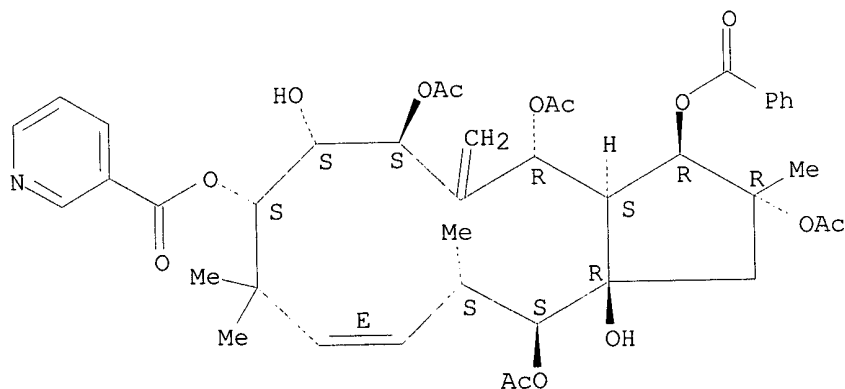
CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-  
2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-  
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-  
cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN	210108-89-7	HCAPLUS
CN	3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)	

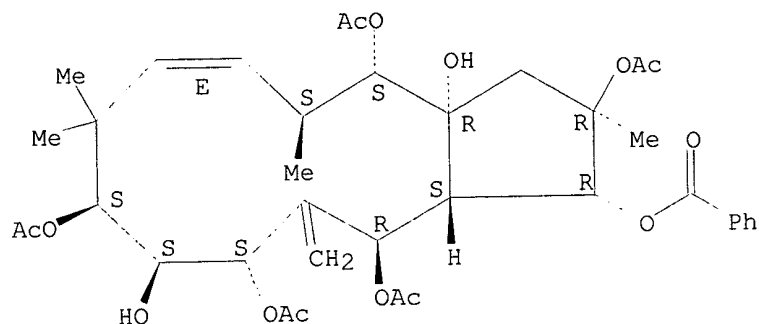
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN	210108-90-0	HCAPLUS
CN	3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol, 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene- 1,2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R, 13aS)- (9CI) (CA INDEX NAME)	

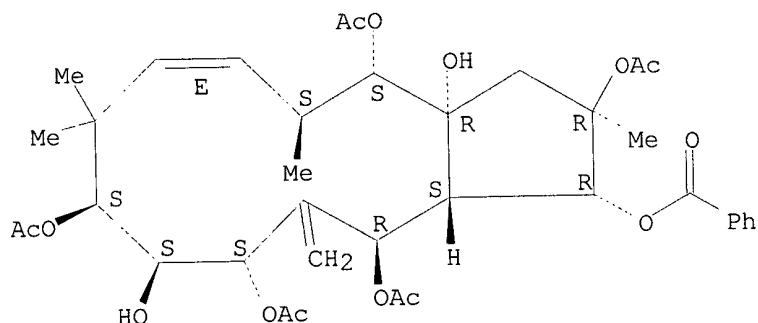
Absolute stereochemistry.  
Double bond geometry as described by E or Z.



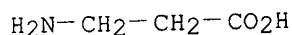


RN 210108-90-0 HCAPLUS  
 CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
 , 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,  
 13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as described by E or Z.

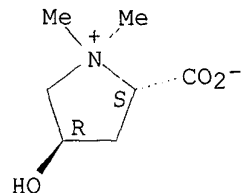


IT 107-95-9, .beta.-Alanine 515-25-3 590-46-5,  
 Betaine hydrochloride  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (carrier; Euphorbiaceae macrocyclic diterpene for treatment of  
 infection and PKC-related conditions)  
 RN 107-95-9 HCAPLUS  
 CN .beta.-Alanine (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 515-25-3 HCAPLUS  
 CN Pyrrolidinium, 2-carboxy-4-hydroxy-1,1-dimethyl-, inner salt, (2S,4R)-  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 590-46-5 HCAPLUS

CN Methanaminium, 1-carboxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

 $\text{Me}_3^+\text{N}-\text{CH}_2-\text{CO}_2\text{H}$ ● Cl<sup>-</sup>

IC ICM A61K035-78  
 ICS A61K031-455; A61K031-22; A61P031-02; G06F019-00  
 CC 1-5 (Pharmacology)  
 Section cross-reference(s): 63  
 ST Euphorbiaceae macrocyclic diterpene antiinfective; PKC disease  
 Euphorbiaceae macrocyclic diterpene  
 IT Acalypha  
 Acidoton  
 Actinostemon  
 Adelia  
 Adenocline  
 Adenocrepis  
 Adenophaedra  
 Adisca  
 Agrostistachys  
 Alchornea  
 Alchorneopsis  
 Alcinaeanthus  
 Alcoceria  
 Alcoholism  
 Aleurites  
 Amanoa  
 Andrachne  
 Angostyles  
 Anisophyllum  
 Anti-Alzheimer's agents  
 Anti-infective agents  
 Anti-inflammatory agents  
 Anti-ischemic agents  
 Antiarthritics  
 Antiasthmatics  
 Antibacterial agents  
 Antidepressants  
 Antidesma  
 Antidiabetic agents  
 Antihypertensives  
 Antirheumatic agents  
 Antiviral agents

Aphora  
Aporosa  
Aporosella  
Argythamnia  
Astrococcus  
Astrogyne  
Autoimmune disease  
Baccaurea  
Baliospermum  
Bernardia  
Beyeriopsis  
Bischofia  
Blachia  
Blumeodondron  
Bonania  
Bradleia  
Breynia  
Breyniopsis  
Briedelia  
Buraeavia  
Caletia  
Caperonia  
Cardiovascular agents  
Caryodendron  
Celianella  
Cephalocroton  
Chaenotheca  
Chaetocarpus  
Cheilosa  
Chiropetalum  
Choriophyllum  
Cicca  
Cleidion  
Cleistanthus  
Clutia  
Cnesmone  
Cnidoscolus  
Coccoceras  
Codiaeum  
Coelodiscus  
Computer application  
Computer program  
Conami  
Conceveiba  
Conceveibastrum  
Conceveibum  
Corythea  
Croizatia  
Croton  
Crotonopsis  
Crozophora  
Cubanthus  
Cunuria  
Dactylostemon  
Dalechampia  
Dendrocousinsia  
Diasperus  
Didymocistus  
Dimorphocalyx  
Discocarpus

Ditaxis  
Dodecastigma  
Drug screening  
Drypetes  
Dysopsis  
Elateriospermum  
Endadenium  
Endadenium gossweileri  
Endospermum  
Erismanthus  
Erythrocarpus  
Erythrochilus  
Eumecanthus  
Euphorbia  
Euphorbia aaron-rossii  
Euphorbia abbreviata  
Euphorbia acuta  
Euphorbia alatocaulis  
Euphorbia albicaulis  
Euphorbia albomarginata  
Euphorbia alicae  
Euphorbia alta  
Euphorbia anacampseros  
Euphorbia andromedae  
Euphorbia angusta  
Euphorbia anthonyi  
Euphorbia antiguensis  
Euphorbia apocynifolia  
Euphorbia arabica  
Euphorbia ariensis  
Euphorbia arizonica  
Euphorbia arkansana  
Euphorbia arteagae  
Euphorbia arundelana  
Euphorbia astroites  
Euphorbia atrococca  
Euphorbia baselices  
Euphorbia batabanensis  
Euphorbia bergeri  
Euphorbia bermudiana  
Euphorbia bicolor  
Euphorbia biformis  
Euphorbia bifurcata  
Euphorbia bilobata  
Euphorbia biramensis  
Euphorbia biuncialis  
Euphorbia blepharostipula  
Euphorbia blodgettii  
Euphorbia boerhaavioides  
Euphorbia boliviana  
Euphorbia bracei  
Euphorbia brachiata  
Euphorbia brachycera  
Euphorbia brandegeei  
Euphorbia brittonii  
Euphorbia caesia  
Euphorbia calcicola  
Euphorbia campestris  
Euphorbia candelabrum  
Euphorbia capitellata

Euphorbia carmenensis  
Euphorbia carunculata  
Euphorbia cayensis  
Euphorbia celastroides  
Euphorbia chalicophila  
Euphorbia chamaerhodos  
Euphorbia chamaesula  
Euphorbia chiapensis  
Euphorbia chiogenoides  
Euphorbia cinerascens  
Euphorbia clarionensis  
Euphorbia colimae  
Euphorbia colorata  
Euphorbia commutata  
Euphorbia consoquitlae  
Euphorbia convolvuloides  
Euphorbia corallifera  
Euphorbia creberrima  
Euphorbia crenulata  
Euphorbia cubensis  
Euphorbia cuspidata  
Euphorbia cymbiformis  
Euphorbia darlingtonii  
Euphorbia defoliata  
Euphorbia degeneri  
Euphorbia deltoidea  
Euphorbia dentata  
Euphorbia depressa  
Euphorbia dictyosperma  
Euphorbia dioeca  
Euphorbia discoidalis  
Euphorbia dorsiventralis  
Euphorbia drummondii  
Euphorbia duclouxii  
Euphorbia dussii  
Euphorbia eanophylla  
Euphorbia eggersii  
Euphorbia eglandulosa  
Euphorbia elata  
Euphorbia enalla  
Euphorbia eriogonoides  
Euphorbia eriophylla  
Euphorbia esculaeformis  
Euphorbia espirituensis  
Euphorbia esula  
Euphorbia excisa  
Euphorbia exclusiva  
Euphorbia exstipitata  
Euphorbia exstipulata  
Euphorbia fendleri  
Euphorbia filicaulis  
Euphorbia filiformis  
Euphorbia florida  
Euphorbia fruticulosa  
Euphorbia garberi  
Euphorbia gaumerii  
Euphorbia gerardiana  
Euphorbia geyeri  
Euphorbia glyptosperma  
Euphorbia gorgonis

Euphorbia gracilior  
 Euphorbia gracillima  
 Euphorbia gradyi  
 Euphorbia graminea  
 Euphorbia graminea  
 Euphorbia grisea  
 Euphorbia guadalajarana  
 Euphorbia guanarensis  
 Euphorbia gymnadenia  
 Euphorbia haematantha  
 Euphorbia hedyotoides  
 Euphorbia heldrichii  
 Euphorbia helenae  
 Euphorbia helleri  
 Euphorbia helwigii  
 Euphorbia henricksonii  
 Euphorbia heterophylla  
 Euphorbia hexagona  
 Euphorbia hexagonoides  
 Euphorbia hinkleyorum  
 Euphorbia hintonii  
 Euphorbia hirta  
 Euphorbia hirtula  
 Euphorbia hooveri  
 Euphorbia humistrata  
 Euphorbia hypericifolia  
 Euphorbia inundata  
 Euphorbia involuta  
 Euphorbia jaliscensis  
 Euphorbia jejuna  
 Euphorbia johnstonii  
 Euphorbia juttae

(Euphorbiaceae macrocyclic diterpene for treatment of infection and  
 PKC-related conditions)

IT Euphorbia knuthii  
 Euphorbia lasiocarpa  
 Euphorbia lata  
 Euphorbia latazi  
 Euphorbia latericolor  
 Euphorbia laxiflora  
 Euphorbia lecheoides  
 Euphorbia ledienii  
 Euphorbia leucophylla  
 Euphorbia lineata  
 Euphorbia linguiformis  
 Euphorbia longecornuta  
 Euphorbia longepetiolata  
 Euphorbia longeramosa  
 Euphorbia longinsulicola  
 Euphorbia longipila  
 Euphorbia lupulina  
 Euphorbia lurida  
 Euphorbia lycioides  
 Euphorbia macropodoides  
 Euphorbia macvaughiana  
 Euphorbia manca  
 Euphorbia mandoniana  
 Euphorbia mangleti  
 Euphorbia mango  
 Euphorbia marylandica

Euphorbia mayana  
Euphorbia melanadenia  
Euphorbia melanocarpa  
Euphorbia meridensis  
Euphorbia mertonii  
Euphorbia mexiae  
Euphorbia microcephala  
Euphorbia microclada  
Euphorbia micromera  
Euphorbia misella  
Euphorbia missurica  
Euphorbia montana  
Euphorbia montereyana  
Euphorbia multicaulis  
Euphorbia multiformis  
Euphorbia multinodis  
Euphorbia multiseta  
Euphorbia muscicola  
Euphorbia neomexicana  
Euphorbia nephradenia  
Euphorbia niqueroana  
Euphorbia oaxacana  
Euphorbia occidentalis  
Euphorbia odontodenia  
Euphorbia olivacea  
Euphorbia olowaluana  
Euphorbia ophthalmica  
Euphorbia ovata  
Euphorbia pachypoda  
Euphorbia pachyrhiza  
Euphorbia padifolia  
Euphorbia palmeri  
Euphorbia paludicola  
Euphorbia parishii  
Euphorbia parryi  
Euphorbia parviflora  
Euphorbia paxiana  
Euphorbia pediculifera  
Euphorbia peplidion  
Euphorbia peploides  
Euphorbia peplus  
Euphorbia pergamena  
Euphorbia perligna  
Euphorbia petaloidea  
Euphorbia petrina  
Euphorbia picachensis  
Euphorbia pilosula  
Euphorbia pinariona  
Euphorbia pinctorum  
Euphorbia pionosperma  
Euphorbia platysperma  
Euphorbia plicata  
Euphorbia poeppigii  
Euphorbia poliosperma  
Euphorbia polycarpa  
Euphorbia polycnemoides  
Euphorbia polyphylla  
Euphorbia portoricensis  
Euphorbia portulacoides  
Euphorbia portulana

Euphorbia preslii  
Euphorbia prostrata  
Euphorbia pteroneura  
Euphorbia pycnanthemum  
Euphorbia ramosa  
Euphorbia rapulum  
Euphorbia remyi  
Euphorbia retroscabra  
Euphorbia revoluta  
Euphorbia rivularis  
Euphorbia robusta  
Euphorbia rubida  
Euphorbia rubrosperma  
Euphorbia rupicola  
Euphorbia sanmartensis  
Euphorbia saxatilis  
Euphorbia schizoloba  
Euphorbia sclerocyathium  
Euphorbia scopulorum  
Euphorbia senilis  
Euphorbia serpyllifolia  
Euphorbia serrula  
Euphorbia setiloba  
Euphorbia sonorae  
Euphorbia soobyi  
Euphorbia sparsiflora  
Euphorbia sphaerosperma  
Euphorbia spruceana  
Euphorbia stellata  
Euphorbia subcoerulea  
Euphorbia submammularis  
Euphorbia subpeltata  
Euphorbia subpubens  
Euphorbia subreniforme  
Euphorbia subtrifoliata  
Euphorbia succedanea  
Euphorbia syphilitica  
Euphorbia tamaulipasana  
Euphorbia telephioides  
Euphorbia tenuissima  
Euphorbia tetrapora  
Euphorbia tirucalli  
Euphorbia tomentella  
Euphorbia tomentosa  
Euphorbia torralbasii  
Euphorbia towarensis  
Euphorbia trachysperma  
Euphorbia tricolor  
Euphorbia troyana  
Euphorbia tuerckheimii  
Euphorbia turczaninowii  
Euphorbia umbellulata  
Euphorbia undulata  
Euphorbia vermiformis  
Euphorbia versicolor  
Euphorbia villifera  
Euphorbia violacea  
Euphorbia whitei  
Euphorbia xanti  
Euphorbia xylopoda



Euphorbia yayalesia  
Euphorbia yungasensis  
Euphorbia zeravschanica  
Euphorbia zinniiflora  
Euphorbiaceae  
Euphorbiodendron  
Excoecaria  
Fluggea  
Garcia  
Gavarretia  
Gelonium  
Givotia  
Glochidion  
Glochidionopsis  
Glycydendron  
Gymnanthes  
Gymnosporia  
Haematospermum  
Hendecandras  
Hevea  
Hieronima  
Hippocrepantha  
Homalanthus  
Human herpesvirus 4  
Human immunodeficiency virus 1  
Hymenocardia  
Immunostimulants  
Janipha  
Jatropha  
Julocroton  
Lasiocroton  
Leiocarpus  
Leonardia  
Lepidanthus  
Leucocroton  
Leukocyte  
Mabea  
Macaranga  
Macrocroton  
Mallotus (plant)  
Manihot  
Mappa  
Maprounea  
Melanthesa  
Mercurialis  
Mettenia  
Micrandra  
Microdesmis  
Microelus  
Microstachys  
Monadenium  
Monadenium guentheri  
Monadenium lugardae  
Mononuclear cell (leukocyte)  
Mozinna  
Neoscortechinia  
Neutrophil  
Omalthus  
Omphalea  
Ophellantha

Orbicularia  
 Ostodes  
 Oxydectes  
 Palenga  
 Pantadenia  
 Paradrypetes  
 Pausandra  
 Pedilanthus  
 Pera  
 Peridium  
 Pétalostigma  
 Phagocytosis  
 Phyllanthus  
 Picrodendron  
 Pierardia  
 Pilinophytum  
 Pimeleodendron  
 Piranhea  
 Platygyne  
 Plukenetia  
 Podocalyx  
 Poinsettia  
 Poraresia  
 Prosartema  
 Pseudanthus  
 Psoriasis  
 Pycnocomma  
 Quadrasia  
 Reverchonia  
 Richeria  
 Richeriella  
 Ricinella  
 Ricinocarpos  
 Rottlera  
 Sagotia  
 Sandwithia  
 Sapium  
 Savia

(Euphorbiaceae macrocyclic diterpene for treatment of infection and  
 PKC-related conditions)

IT Sclerocroton  
 Sebastiania  
 Securinega  
 Senefeldera  
 Senefelderopsis  
 Serophyton  
 Siphonia  
 Spathiostemon  
 Spixia  
 Stillingia  
 Strophoblachia  
 Synadenium  
 Synadenium compactum  
 Synadenium grantii  
 Tetracoccus  
 Tetraplandra  
 Tetrorchidium  
 Thyrsanthera  
 Tithymalus  
 Tragia

- Transplant and Transplantation
- Trewia
- Trigonostemon
- Tyria
- Xylophylla
  - (Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Promoter (genetic element)
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
  - (Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Diterpenes
  - Macrocyclic compounds
  - RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
  - (Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Antiarteriosclerotics
  - (antiatherosclerotics; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Dermatitis
  - (atopic; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Respiration, animal
  - (burst; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Ovary, neoplasm
  - (carcinoma, inhibitors; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Blood
  - (disease; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Diterpenes
  - RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
  - (esters; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Gene
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
  - (expression, PKC-dependent; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Skin, disease
  - (hyperplastic dermatosis; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Heart, disease
  - (hypertrophy; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Biological transport
  - (intracellular, PKC; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Heart, disease
  - (ischemia; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Virus
  - (latent; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Mental disorder
  - (manic bipolar disorder; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Antitumor agents

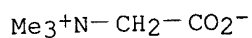
- (melanoma; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Lymphocyte  
(natural killer cell; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Antitumor agents  
(ovary carcinoma; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Cytomegalovirus  
(promoter; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Multiple sclerosis  
(therapeutic agents; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Drug delivery systems  
(tinctures, tincture; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Cell differentiation  
(to bipolar dendritic phenotype; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Drug delivery systems  
(topical; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT 16561-29-8, Pma 37558-16-0, Phorbol dibutyrate  
141436-78-4, Protein kinase C  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT 67707-88-4, Ingenane 67707-88-4D,  
Ingenane, derivs. 75567-37-2 82425-35-2  
210108-85-3, Jatrophane 1 210108-85-3D, Jatrophane 1,  
derivs. 210108-86-4, Jatrophane 2 210108-86-4D,  
Jatrophane 2, derivs. 210108-87-5, Jatrophane 3  
210108-87-5D, Jatrophane 3, derivs. 210108-88-6,  
Jatrophane 4 210108-88-6D, Jatrophane 4, derivs.  
210108-89-7, Jatrophane 5 210108-89-7D, Jatrophane 5,  
derivs. 210108-90-0, Jatrophane 6 210108-90-0D,  
Jatrophane 6, derivs.  
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU  
(Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)  
(Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT 107-95-9, .beta.-Alanine 515-25-3 590-46-5,  
Betaine hydrochloride  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(carrier; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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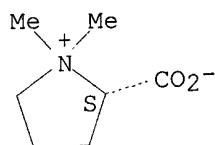
L4 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1999:136872 HCAPLUS  
 DOCUMENT NUMBER: 130:205113  
 TITLE: Anticancer compounds from Euphorbia  
 INVENTOR(S): Aylward, James Harrison  
 PATENT ASSIGNEE(S): Peplin Pty. Ltd., Australia  
 SOURCE: PCT Int. Appl., 92 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9908994	A1	19990225	WO 1998-AU656	19980819
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2301082	AA	19990225	CA 1998-2301082	19980819
AU 9887217	A1	19990308	AU 1998-87217	19980819
AU 736230	B2	20010726		
EP 1015413	A1	20000705	EP 1998-938534	19980819
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9811327	A	20000919	BR 1998-11327	19980819
JP 2001515059	T2	20010918	JP 2000-509681	19980819
US 2001051644	A1	20011213	US 2001-888997	20010621
PRIORITY APPLN. INFO.:				
			AU 1997-8640	A 19970819
			WO 1998-AU656	W 19980819
			US 2000-486199	A3 20000728
AB	The invention relates to a compd. or group of compds. present in an active principle derived from plants of the species Euphorbia peplus, Euphorbia hirta, and Euphorbia drummondii, and to pharmaceutical compns. comprising these compds. Exts. from these plants have been found to show selective cytotoxicity against several different cancer cell lines. The compds. are useful in effective treatment of cancers, particularly malignant melanomas and squamous cell carcinomas. In a preferred embodiment, the compd. is selected from jatrophanes, pepluanes, paralianes and ingenanes, and pharmaceutically-acceptable salts or esters thereof, and more particularly jatrophanes of Conformation II.			
IT	107-43-7, Glycine betaine 471-87-4, Stachydrine 475-11-6, N-Methylproline 515-25-3 4252-82-8 6340-41-6 220941-15-1			
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (anticancer compds. from Euphorbia)			
RN	107-43-7 HCAPLUS			
CN	Methanaminium, 1-carboxy-N,N,N-trimethyl-, inner salt (9CI) (CA INDEX NAME)			



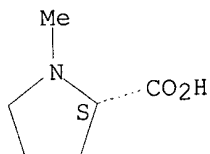
RN 471-87-4 HCAPLUS  
 CN Pyrrolidinium, 2-carboxy-1,1-dimethyl-, inner salt, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



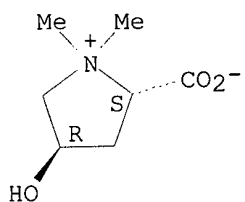
RN 475-11-6 HCAPLUS  
 CN L-Proline, 1-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



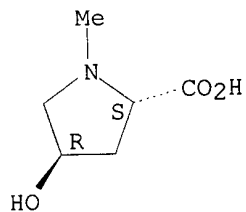
RN 515-25-3 HCAPLUS  
 CN Pyrrolidinium, 2-carboxy-4-hydroxy-1,1-dimethyl-, inner salt, (2S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



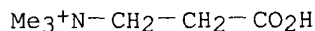
RN 4252-82-8 HCAPLUS  
 CN L-Proline, 4-hydroxy-1-methyl-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 6340-41-6 HCAPLUS

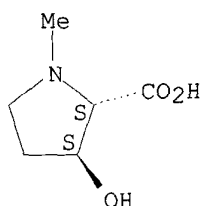
CN Ethanaminium, 2-carboxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



RN 220941-15-1 HCAPLUS

CN L-Proline, 3-hydroxy-1-methyl-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



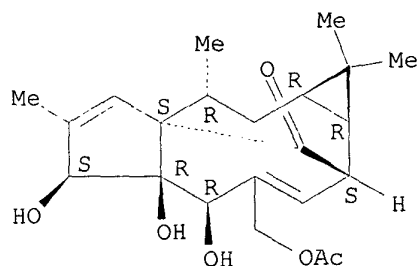
IT 64280-37-1P 210108-85-3P, Jatrophane 1  
210108-86-4P, Jatrophane 2 210108-87-5P, Jatrophane 3  
210108-88-6P, Jatrophane 4 210108-89-7P, Jatrophane 5  
210108-90-0P, Jatrophane 6 210108-91-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(anticancer compds. from Euphorbia)

RN 64280-37-1 HCAPLUS

CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclododecen-11-one,  
4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a,6-trihydroxy-  
1,1,7,9-tetramethyl-, (1aR,2S,5R,5aR,6S,8a1S,9R,10aR)- (9CI) (CA INDEX  
NAME)

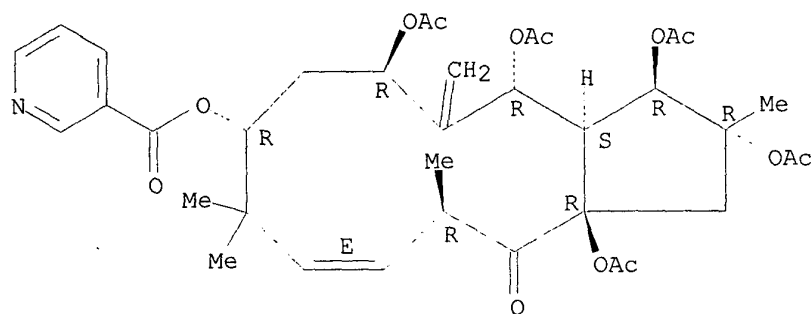
Absolute stereochemistry.



RN 210108-85-3 HCAPLUS

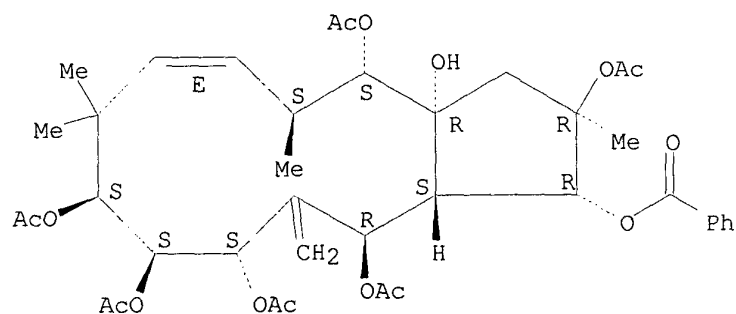
CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS  
CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
,2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13  
R,13aS)- (9CI) (CA INDEX NAME)

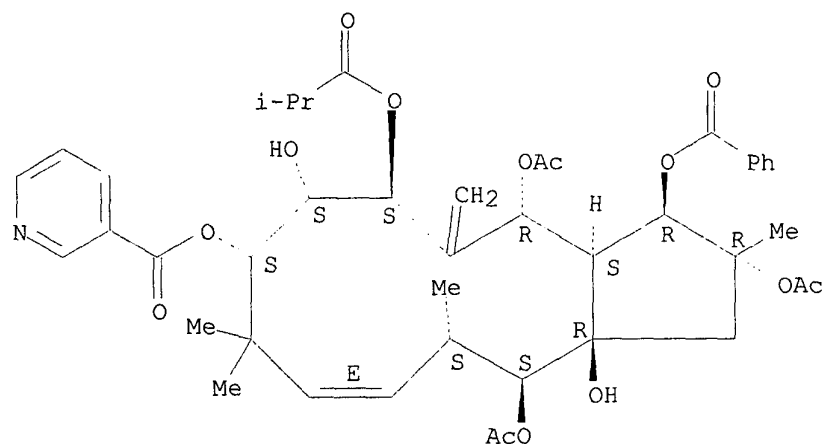
Absolute stereochemistry. Rotation (-).  
Double bond geometry as described by E or Z.



RN 210108-87-5 HCAPLUS  
CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-  
tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-  
7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-  
1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.

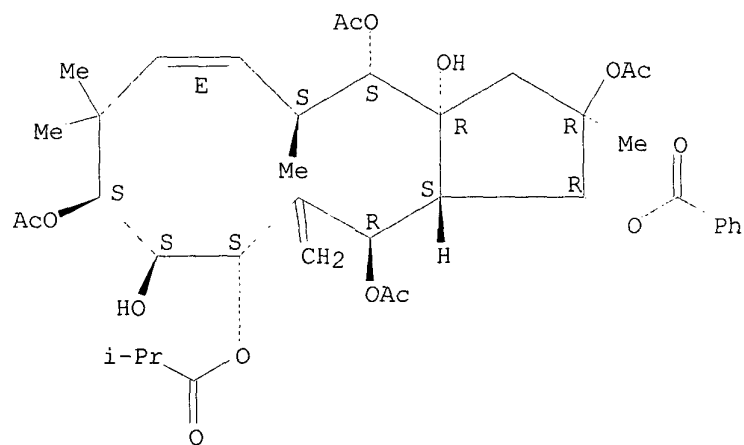




RN 210108-88-6 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

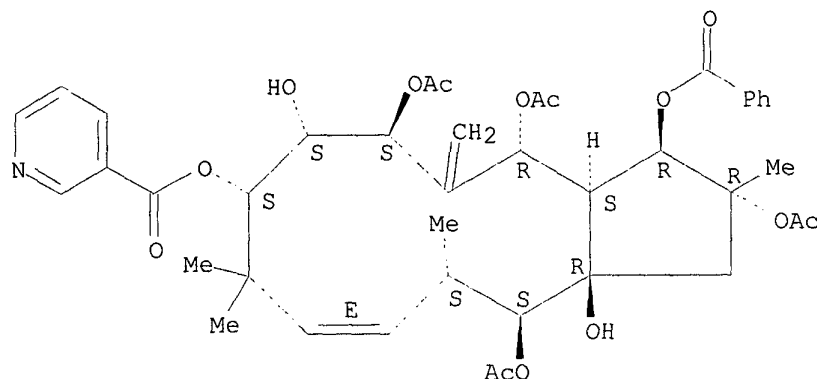
Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as described by E or Z.

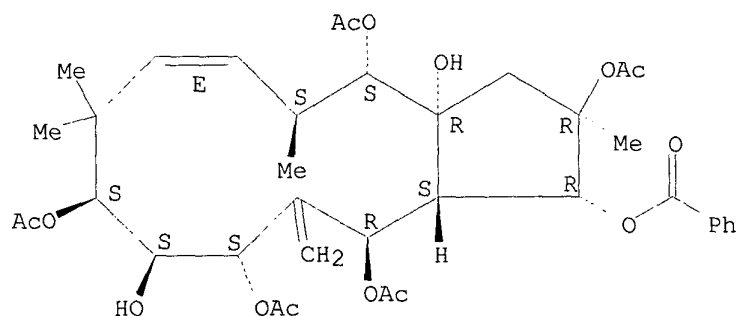


RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,  
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-  
 , 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,  
 13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

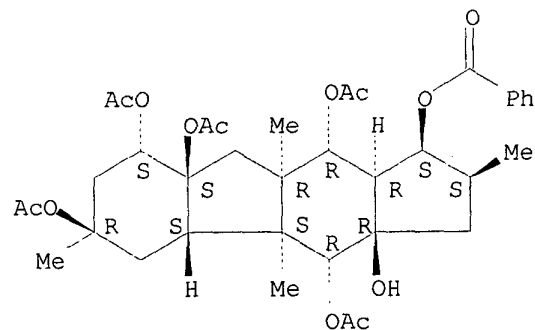
Double bond geometry as described by E or Z.



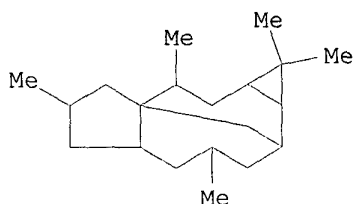
RN 210108-91-1 HCAPLUS

CN Cyclopenta[b]fluorene-1,3a,4,6,8,8a,10(1H,4H)-heptol, dodecahydro-  
 2,4a,6,9a-tetramethyl-, 4,6,8,8a,10-pentaacetate 1-benzoate,  
 (1S,2S,3aR,4R,4aS,4bS,6R,8R,8aR,9aR,10R,10aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

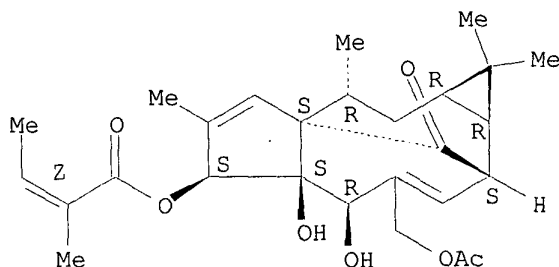


IT 67707-88-4, Ingenane 82425-35-2  
 82425-35-2D, esters 210108-91-1D, esters  
 220941-16-2D, esters 220941-18-4D, esters  
 220941-19-5D, esters 220941-20-8D, esters  
 220941-21-9D, esters 220941-22-0D, esters  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (anticancer compds. from Euphorbia)  
 RN 67707-88-4 HCAPLUS  
 CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX NAME)



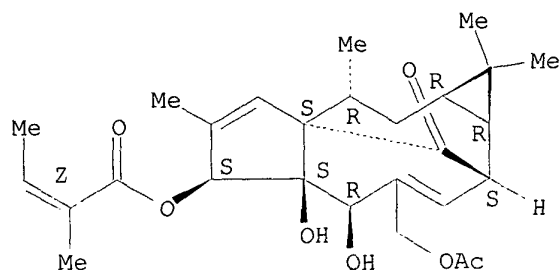
RN 82425-35-2 HCAPLUS  
 CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
 Double bond geometry as shown.



RN 82425-35-2 HCAPLUS  
 CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

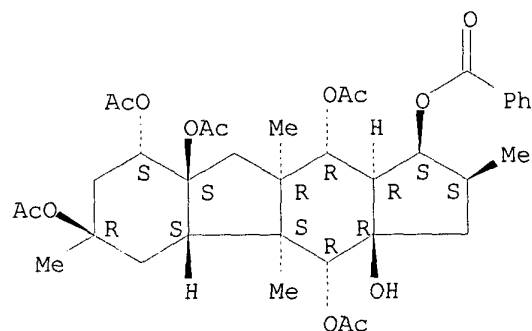
Absolute stereochemistry. Rotation (+).  
 Double bond geometry as shown.



RN 210108-91-1 HCAPLUS

CN Cyclopenta[b]fluorene-1,3a,4,6,8,8a,10(1H,4H)-heptol, dodecahydro-  
2,4a,6,9a-tetramethyl-, 4,6,8,8a,10-pentaacetate 1-benzoate,  
(1S,2S,3aR,4R,4aS,4bS,6R,8R,8aR,9aR,10R,10aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

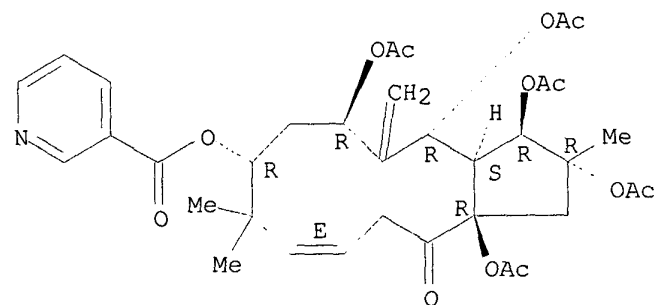


RN 220941-16-2 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,13aR)-2,3,4,6,13a-  
pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9-  
trimethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.



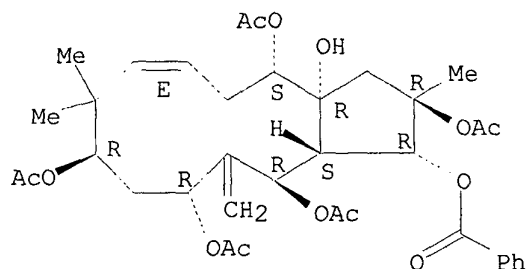
RN 220941-18-4 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,11,13-heptol,  
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,8,8-trimethyl-12-methylene-,  
2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,6E,9R,11R,13R,13aS)-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

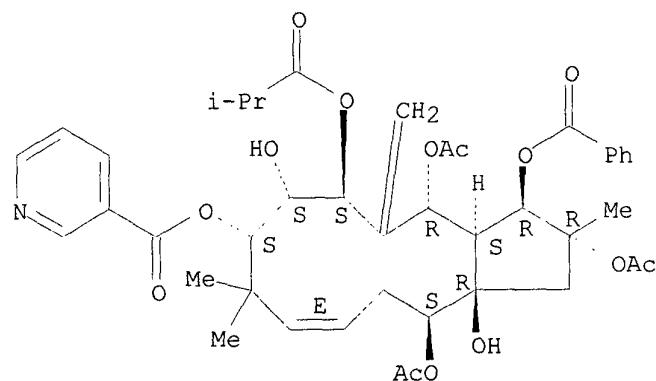


RN 220941-19-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9-trimethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

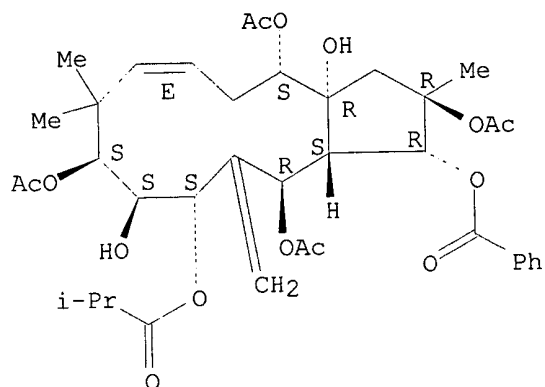


RN 220941-20-8 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9-trimethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

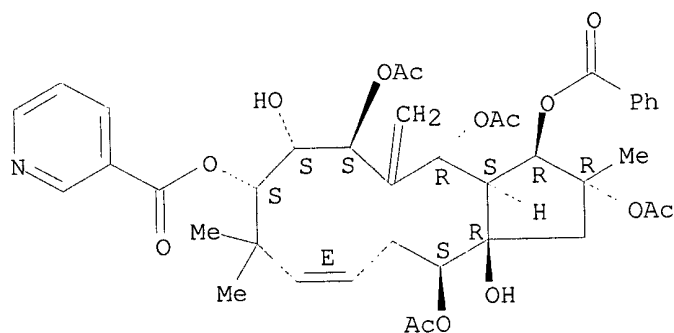
Absolute stereochemistry.

Double bond geometry as described by E or Z.



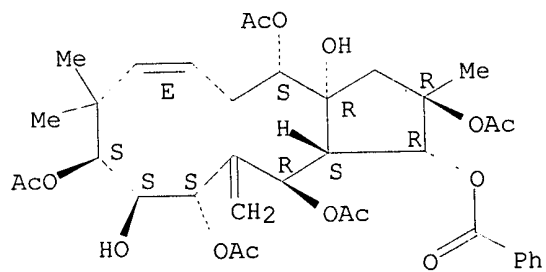
RN 220941-21-9 HCAPLUS  
 CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,13S,13aR)-2,4,6,13-tetrakis(acetyloxy)-3-(benzyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9-trimethyl-5-methylene-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as described by E or Z.



RN 220941-22-0 HCAPLUS  
 CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol, 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,8,8-trimethyl-12-methylene-, 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,6E,9S,10S,11S,13R,13aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as described by E or Z.



IT 9001-87-0, Phospholipase D 9075-81-4, Sialyltransferase  
 151185-16-9, Fibroblast growth factor 9  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (gene; anticancer compds. from Euphorbia)  
 RN 9001-87-0 HCAPLUS  
 CN Phospholipase D (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 9075-81-4 HCAPLUS  
 CN Sialyltransferase, cytidine monophosphoacetylneuraminate-  
 galactosylglycoprotein (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 151185-16-9 HCAPLUS  
 CN Fibroblast growth factor 9 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 10028-15-6, Ozone, biological studies  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
 (skin damage from exposure to; anticancer compds. from Euphorbia)  
 RN 10028-15-6 HCAPLUS  
 CN Ozone (8CI, 9CI) (CA INDEX NAME)

O-O-O

IT 141436-78-4, Protein kinase C  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (zeta, gene; anticancer compds. from Euphorbia)  
 RN 141436-78-4 HCAPLUS  
 CN Kinase (phosphorylating), protein, C (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IC ICM C07C069-78  
 ICS C07C069-533; C07D213-80; C07G017-00; A61K035-78; A61K031-455;  
 A61K031-22; A61K031-325  
 CC 1-6 (Pharmacology)  
 Section cross-reference(s): 11, 63  
 ST Euphorbia antitumor agent; melanoma squamous cell carcinoma Euphorbia  
 compd; jatrophane pepluane paraliane ingenane Euphorbia  
 antitumor  
 IT Growth factors, animal  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (80H-K, gene; anticancer compds. from Euphorbia)  
 IT Animal cell line  
 (A549; anticancer compds. from Euphorbia)  
 IT Cyclophilins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (B, gene; anticancer compds. from Euphorbia)  
 IT Animal cell line  
 (B16; anticancer compds. from Euphorbia)  
 IT Animal cell line  
 (Colo16; anticancer compds. from Euphorbia)  
 IT DNA  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (DNA-damaging agents, adjuvant to; anticancer compds. from Euphorbia)  
 IT Proteins, specific or class  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)

(GADD45, gene; anticancer compds. from Euphorbia)

IT Heat-shock proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(HSP 27, gene; anticancer compds. from Euphorbia)

IT Profilins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(II, gene; anticancer compds. from Euphorbia)

IT Proteins, specific or class  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(LAMP7-E1, gene; anticancer compds. from Euphorbia)

IT Animal cell line  
(LIM1215; anticancer compds. from Euphorbia)

IT Animal cell line  
(MCC16; anticancer compds. from Euphorbia)

IT Animal cell line  
(MCF-7; anticancer compds. from Euphorbia)

IT Histocompatibility antigens  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(MHC (major histocompatibility complex), class I, gene; anticancer compds. from Euphorbia)

IT Animal cell line  
(MM2058; anticancer compds. from Euphorbia)

IT Animal cell line  
(MM220; anticancer compds. from Euphorbia)

IT Animal cell line  
(MM229; anticancer compds. from Euphorbia)

IT Animal cell line  
(MM537; anticancer compds. from Euphorbia)

IT Animal cell line  
(MM96L; anticancer compds. from Euphorbia)

IT Skin  
Skin  
(Merkel cell, Merkel cell carcinoma inhibitors; anticancer compds. from Euphorbia)

IT Proteins, specific or class  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(P58, XP group C, gene; anticancer compds. from Euphorbia)

IT Cell proliferation  
(T cell; anticancer compds. from Euphorbia)

IT Proteins, specific or class  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Wilm's tumor-related protein, gene; anticancer compds. from Euphorbia)

IT Proteins, specific or class  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(XP group C HHR2, gene; anticancer compds. from Euphorbia)

IT Keratosis  
(actinic; anticancer compds. from Euphorbia)

IT Radiotherapy  
(adjuvant to; anticancer compds. from Euphorbia)

IT Antitumor agents  
Cell proliferation  
Drug delivery systems  
Euphorbia  
Euphorbia drummondii  
Euphorbia hirta  
Euphorbia peplus  
HeLa cell  
Immunostimulants  
Radioprotectants  
(anticancer compds. from Euphorbia)



IT Skin, neoplasm  
 Skin, neoplasm  
 (basal cell carcinoma, inhibitors; anticancer compds. from Euphorbia)

IT Antitumor agents  
 Antitumor agents  
 (basal cell carcinoma; anticancer compds. from Euphorbia)

IT Antitumor agents  
 (carcinoma, Merkel cell; anticancer compds. from Euphorbia)

IT Uterus, neoplasm  
 (cervix, inhibitors; anticancer compds. from Euphorbia)

IT Antitumor agents  
 (cervix; anticancer compds. from Euphorbia)

IT Phosphoproteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (cofilins, gene; anticancer compds. from Euphorbia)

IT Intestine, neoplasm  
 (colon, inhibitors; anticancer compds. from Euphorbia)

IT Antitumor agents  
 (colon; anticancer compds. from Euphorbia)

IT Skin, disease  
 (damage; anticancer compds. from Euphorbia)

IT Metallothioneins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (gene, activation; anticancer compds. from Euphorbia)

IT G proteins (guanine nucleotide-binding proteins)  
 Granulocyte colony-stimulating factor receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (gene; anticancer compds. from Euphorbia)

IT Heat-shock proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (hsp 28, gene; anticancer compds. from Euphorbia)

IT Cell differentiation  
 (inducers; anticancer compds. from Euphorbia)

IT Lung, neoplasm  
 Skin, neoplasm  
 Skin, neoplasm  
 (inhibitors; anticancer compds. from Euphorbia)

IT Proteins, specific or class  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (ionizing radiation resistance (DAP3), gene; anticancer compds. from Euphorbia)

IT Antitumor agents  
 (lung; anticancer compds. from Euphorbia)

IT Antitumor agents  
 (mammary gland; anticancer compds. from Euphorbia)

IT Antitumor agents  
 (melanoma; anticancer compds. from Euphorbia)

IT Gene, animal  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (metallothionein, activation; anticancer compds. from Euphorbia)

IT Mammary gland  
 (neoplasm, inhibitors; anticancer compds. from Euphorbia)

IT Gene, animal  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (oncogene, TAX; anticancer compds. from Euphorbia)

IT Melanocyte  
 (proliferation induction; anticancer compds. from Euphorbia)

IT T cell (lymphocyte)

- (proliferation; anticancer compds. from Euphorbia)
- IT Proteins, specific or class  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(retinol-binding, 1, gene; anticancer compds. from Euphorbia)
- IT Ionizing radiation  
Microwave  
UV radiation  
(skin damage from; anticancer compds. from Euphorbia)
- IT Antitumor agents  
(skin squamous cell carcinoma; anticancer compds. from Euphorbia)
- IT Antitumor agents  
Antitumor agents  
(skin; anticancer compds. from Euphorbia)
- IT Proteins, specific or class  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(small G protein TTF, gene; anticancer compds. from Euphorbia)
- IT Antitumor agents  
(solid tumor; anticancer compds. from Euphorbia)
- IT Skin, neoplasm  
(squamous cell carcinoma, inhibitors; anticancer compds. from Euphorbia)
- IT Antitumor agents  
(squamous cell carcinoma; anticancer compds. from Euphorbia)
- IT Tubulins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(.alpha. k1, gene; anticancer compds. from Euphorbia)
- IT Proteins, specific or class  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(.beta.-polypeptide 3, gene; anticancer compds. from Euphorbia)
- IT 107-43-7, Glycine betaine 471-87-4, Stachydrine  
475-11-6, N-Methylproline 515-25-3 4252-82-8  
6340-41-6 220941-15-1  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(anticancer compds. from Euphorbia)
- IT 64280-37-1P 210108-85-3P, Jatrophane 1  
210108-86-4P, Jatrophane 2 210108-87-5P, Jatrophane 3  
210108-88-6P, Jatrophane 4 210108-89-7P, Jatrophane 5  
210108-90-0P, Jatrophane 6 210108-91-1P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(anticancer compds. from Euphorbia)
- IT 67707-88-4, Ingenane 82425-35-2  
82425-35-2D, esters 210108-91-1D, esters  
220941-16-2D, esters 220941-18-4D, esters  
220941-19-5D, esters 220941-20-8D, esters  
220941-21-9D, esters 220941-22-0D, esters  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(anticancer compds. from Euphorbia)
- IT 9001-87-0, Phospholipase D 9075-81-4, Sialyltransferase  
151185-16-9, Fibroblast growth factor 9  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(gene; anticancer compds. from Euphorbia)
- IT 10028-15-6, Ozone, biological studies  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(skin damage from exposure to; anticancer compds. from Euphorbia)
- IT 141436-78-4, Protein kinase C

TATE 09/888,997

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(zeta, gene; anticancer compds. from Euphorbia).  
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Patent and Trademark Office

80861

Att: Susan Hanley  
**SEARCH REQUEST FORM**

Examiner, # (Mandatory): 73510 Requester's Full Name: Chris TateArt Unit 1654 Location (Bldg/Room#): CM1 11B09 Phone (circle 305) 306 308) 7114Serial Number: 09/888,178 and 09/888,997 Results Format Preferred (circle): PAPER DISK E-MAILTitle of Invention methods of stimulating the immune systemInventors (please provide full names): James H. Aylward (Australia)Earliest Priority Date: 8/1998

Keywords (include any known synonyms registry numbers, explanation of initialisms):

immunostimula?  
 boost the immune system  
 enhance? immuno?  
 etc.

Point of Contact:  
 Susan Hanley  
 Technical Info. Specialist  
 CM1 6B05 Tel: 305-4053

At my request  
 Susan Hanley  
 Also searched  
 the below compounds  
 for anti-cancer  
 activity → see  
 09/888,178

**Search Topic:**

Please write detailed statement of the search topic, and the concept of the invention. Describe as specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc., if known. You may include a copy of the abstract and the broadcast or most relevant claim(s).

Please search the compounds (ingenane derivatives)  
 of clms 74-77 with respect to those  
 that stimulate the immune system  
 (doesn't matter where compound  
 is derived from - as recited in clm 33) - Thanks

**STAFF USE ONLY**Searcher: Hanley

Searcher Phone #: \_\_\_\_\_

Searcher Location: \_\_\_\_\_

Date Picked Up: \_\_\_\_\_

Date Completed: 11/21Clerical Prep Time: 60Terminal Time: 8:58

Number of Databases: \_\_\_\_\_

**Type of Search**

\_\_\_\_ N.A. Sequence

\_\_\_\_ A.A. Sequence

\_\_\_\_ 1 Structure (#)

\_\_\_\_ Bibliographic

\_\_\_\_ Litigation I

\_\_\_\_ Fulltext

\_\_\_\_ Procurement

\_\_\_\_ Other

**Vendors (include cost where applicable)**736 STN

\_\_\_\_ Questel/Orbit

\_\_\_\_ Lexis/Nexis

\_\_\_\_ WWW/Internet

\_\_\_\_ In-house sequence systems (list)

\_\_\_\_ Dialog

\_\_\_\_ Dr. Link

\_\_\_\_ Westlaw

\_\_\_\_ Other (specify)

## Tate, Christopher

---

**From:** Hanley, Susan  
**Sent:** Wednesday, November 13, 2002 11:33 AM  
**To:** Tate, Christopher  
**Subject:** call follow-up

*also search for  
treating cancer*

Hi Chris,  
I got your phone message regarding 09/888,997. No problem. I will include the method of treating in the search.  
I had planned to do this search next week Is that still OK? Sorry that I did not respond earlier but I've been out since Friday  
with  
the cold from hell.

Susan

09/888, 997

Applicant : James Harris Aylward  
Serial No. : to be assigned  
Filed : June 21, 2001  
Page : 2

ney's Docket No.: 07404-003001

### AMENDMENT

Please amend the above-captioned application as follows:

#### *In The Specification:*

Please amend the specification as follows.

Replace the title as filed with the following new title:

A1 --METHODS OF STIMULATING THE IMMUNE SYSTEM--

On page 1, after the title on line 1, under the heading, insert:

A2 --CROSS-REFERENCES TO RELATED APPLICATIONS

The present application is a divisional application of United States Patent Application Serial No. (USSN) 09/486,199, filed February 22, 2000, now pending, which was filed under 35 U.S.C. §371 based on PCT/AU98/00656, filed on August 19, 1998, which claims the benefit of priority to Australian Application No. PO-8640, filed August 19, 1997. These applications are explicitly incorporated herein by reference in their entirety and for all purposes.--

#### *In The Claims:*

A3 Please cancel claims 1 to 32, without prejudice.

Please add the following new claims:

A4 --33. A method of stimulating the immune system, the method comprising administering to <sup>LAB</sup>the subject an effective amount of a compound, wherein the compound is derived from an extract from the sap of a species of *Euphorbia*, wherein the compound

(a) is extractable from the *Euphorbia* sap in the presence of about 95% v/w ethanol,

(b) has cell inhibiting or retarding activity which is neither destroyed by acetone nor by heating at about 95°C for about 15 minutes, and

from  
the  
comps  
recited  
in  
clms  
74-77

79. The method of claim 78, wherein the compounds are selected from the group consisting of a jatropane, a jatropane derivative, a pharmaceutically acceptable salt of a